ENQUIRY DOCUMENT - MR

(Document No : C050-1P39A-YR-MR-1360-42-RFQ)

इंजीनियर्स इंडिया लिमिटेड
(भारत सरकार का उपक्रम)
ENGINEERS INDIA LIMITED
(A Govt. of India Undertaking)

हर एक काम देश के नाम

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इंजीनियर्स इंडिया लिमिटेड (भारत सरकार का उपक्रम)
ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)
Sector 16, Gurugram – 122001 (Haryana), INDIA
Tel. No. : 0124- 380 2000

REQUEST FOR QUOTATION (RFQ)
(e-Bidding)

RFQ No.: SS/C050-1P39A-YR-MR-1360/42 **Date: 16.04.2026**

SL NO.	SALIENT FEATURES		DETAILS
a)	Client	:	Numaligarh Refinery Limited (NRL)
b)	Project	:	Polypropylene Unit (PPU) Project at Numaligarh Refinery, Assam
c)	Item	:	PRESSURE RELIEF VALVES
d)	MR Category	:	II
e)	Pre-Bid meeting	:	Date & Time : 27.04.2026 @ 11.00 AM IST. Pre-Bid Meeting for MR-1360 || PRESSURE RELIEF VALVES for PPU Project, NRL | Meeting-Join | Microsoft Teams
f)	Last date of receipt for pre-bid queries	:	24.04.2026
g)	BID DUE DATE (Last date and time of submission of e-Bids and Mode of Submission of Bid)	:	Up to **12:00 Hrs. IST on 14.05.2026 (*)** **Online Submission(e-Bids)** through CPP Portal (https://eprocure.gov.in/eprocure/app) **Bid submitted through any other mode shall not be acceptable**
h)	UNPRICED BID OPENING (Online Opening of Techno-commercial (Unpriced) e-Bids)	:	**14:00 Hrs. IST on 15.05.2026 (*)**
i)	Bid Validity		**Bids shall be valid for a period of 120 days from the Final Bid Due Date**
j)	Date of Opening of Priced Bids	:	The date & time to be intimated later on to the technically & commercially qualified bidders.
k)	Contact Person for any query/ clarification	:	Mr. Vaibhav Gunjal, Manager (SCM) Phone no. +91-124-289-1379 E-mail ID: vaibhav.gunjal@eil.co.in Mr. Shashi Shekhar, AGM (SCM) Phone no. +91-124-289-1256 E-mail ID: sashi.shekhar@eil.co.in Mr. Lotavath Thavurya,GM (SCM) Phone no. +91-124-289-2509 E-mail ID: l.thavurya@eil.co.in **Please specify NIC Tender ID & RFQ No in all correspondences**

SL NO.	SALIENT FEATURES		DETAILS
l)	**e-Tendering portal for submission of e-bids**	:	**Central Public Procurement Portal (CPPP) website:** *https://eprocure.gov.in/eprocure/app*
m)	**Delivery Period/ Completion Period**	:	**For Supply** Within **08 (Eight) Months)** on FOT Site / warehouse on freight prepaid & door delivery basis from the date of issue of LOA. The date of receipt of all materials at Project site shall be considered as date of delivery.
n)	**EMD & Document Fee**		EMD & Document Fee is Not Applicable, However Bidder to submit Bid Security Declaration enclosed as Annexure B to Bid Data Sheet.
o)	**Communication address for Submission of documents in hard Copy (if any)**		**Address as specified in the Bid Data Sheet (BDS).**
p)	**DEVIATIONS NOT PERMITTED** Bids are invited on "**Zero Deviation Basis**". Accordingly offer is to be submitted in complete compliance to RFQ Terms & Conditions without any deviation. Offer with deviation shall be liable for rejection. Hence Bidder shall ensure submission of complete bid without any deviation as per requirement of Enquiry document in first instance itself.		

Note :
i) If dates identified as (*) above happens to be a declared/closed holiday in EIL-Gurugram, the next working day shall be considered
ii) Attending pre-bid meeting is optional. Non attending the pre-bid meeting will not be a cause for disqualification.

Dear Sir/Madam,

1. Numaligarh Refinery Limited (NRL) is a Government of India Enterprise and a subsidiary of Oil India Ltd. NRL intends to set up Polypropylene Unit [PPU] of design capacity of 360 KTPA for production of homo-polymer PP along with its associated facilities under Polypropylene Unit (PPU) project at Numaligarh Refinery located at Golaghat District in Assam.

   Engineers India Ltd. (EIL) has been appointed the Engineering, Procurement & Construction Management (EPCM) Consultant for this project. EIL invites e-bids for aforesaid Item for PPU Project of NRL.

2. E-bids under **single stage two part bid system** are requested for the captioned item from Eligible Bidders as per the Bidding Document, based on the requirement specified in this MR and in total compliance to technical specifications, scope and terms & conditions of RFQ documents/attachments.

3. All amendments, time extension, clarifications etc. will be uploaded in CPP Portal only. Bidders should regularly visit the e-tendering website of NIC CPP portal https://eprocure.gov.in/eprocure/app to keep themselves updated. No extension in the bid due date / time shall be considered on account of delay in receipt of any document by Mail/Post.

4. Bidders are required to submit their bids complete in all respects in accordance with Instructions to Bidders (ITB) only through e-tendering website of CPP portal (https://eprocure.gov.in/eprocure/app) **on or before the bid-submission date & time** as specified above. Bidder to carefully read and understand the instructions for e-tendering as indicated in ITB to upload their bid on e-tendering website.

Bids sent through Fax/E-mail/ CD/DVD/ Pen Drive/Physical Bids through Courier/Post will not be accepted. However**,** any specific document required to be submitted in physical form as per RFQ shall be submitted in physical form.

5. Bidders are required to register themselves at https://eprocure.gov.in/eprocure/app. No registration fee would be charged from the bidders.

6. Bidders to refer E-Tendering methodology enclosed with this RFQ. Various links such as "Help for Contractor", "Information about DSC", "FAQ", "Resources Required", "Bidders Manual Kit" etc. are available on home page of https://eprocure.gov.in/eprocure/appfacilitating vendors to participate in the bidding process. Bidder are advised to download & utilize the available information/documents under these links for activities like Registration in CPPP, obtaining User ID & Password, uploading & submission of e-bids etc. Bidders are advised in their own interest to carefully go through Instructions for E-tendering and other related document available against various help links so as to ensure that bids are uploaded in E-tendering website well before the closing date and time of bid submission.

7. NIC Portal mandates that the bidders are to be registered on the portal before any enquiry can be issued to them. In order to expedite issue of enquiries, the information of enquiry is being issued through EIL Tender Portal; however, document shall be available on Central Public Procurement Portal. The name of bidder whose NIC ID details are submitted/available to EIL shall be issued the enquiry and enquiry to the balance bidders can only be issued once they will register themselves on NIC portal and provide their registration details to EIL.

   Therefore, all those vendors who have still not registered on the NIC Portal are required to register on the same (immediately after issue of enquiry) and inform the undersigned the registration details for facilitating issue of enquiry to them on the NIC Portal failing which it will not be possible for them to upload their bids.

   All those bidders who have not complied with the above registration requirements will not be issued this enquiry on NIC portal and will not be eligible to bid. Request for extension in due date of submission of bids due to non-registration or delayed registration in NIC portal shall not be entertained.

8. The bid has to be necessarily submitted on the NIC Portal and only those bidders who are issued the enquiry through NIC Portal will be eligible to submit their bids. In case a bidder does not register on the NIC Portal and as a consequence, cannot be issued the enquiry through NIC Portal, it shall be deemed that he is not interested in bidding against this enquiry and no further correspondence will be entertained. Therefore, it is in the interest of the bidders that they register on the NIC Portal at the earliest.

9. The vendor registration on NIC Portal is a very user friendly process. However, in case of any doubt, the vendor may contact the undersigned. In the event of failure in bidder's connectivity with EIL/NIC Portal during the last few hours on account of any unforeseen problem in the website or due to last moment rush, the bidder may likely to miss the deadline for bid submission. In such a case request for extension in bid due date will not be entertained. In view of the same, bidders are advised to upload their bid in advance

10. Please submit your Acknowledgement against the RFQ on EIL's website **http://tenders.eil.co.in** within the due date & time, with reason(s) of not participating in the bidding process in case of regret/negative acknowledgment. In case there is no response, the bidder shall be liable for suitable action including review of their enlistment with EIL for the subject item.

11. EIL registered bidder shall quote only for those Items for which they are registered with EIL as on the date of issuance of RFQ. Items quoted by EIL registered bidder other than the approved range with EIL shall not be considered for evaluation/ award.

12. In case multiple works/units of a supplier are registered with EIL for the same product range/capacity/capability, then such supplier shall be eligible to submit single bid with an option to supply the item(s) from any of its registered work(s) in EIL. However in case of group

companies, only one of the group company is permitted to submit the bid for the same product range/capacity/capability. In case it is found that group companies have submitted bids for the same product range/capacity/capability, bids from such group companies shall not be considered for further evaluation.

13. **Bidders are mandatorily required to indicate their name on each page of excel file of Price Schedule while uploading the price bid.**

14. Bidder to note that the Inspection shall be carried out in line with Inspection Philosophy mentioned in RFQ Document/BDS

15. **Repeat Order :** For applicability of Repeat Order , Bidder to refer Bid Data Sheet (BDS).

16. The offer should be valid as stated in this RFQ. In case Bidder quotes shorter validity of offer, then Bid shall be rejected.

17. RFQ Document is non-transferrable.

18. Subsequent to the submission of bid, bidders are not allowed to change the price or substance of the bid i.e. scope of work, specifications, delivery schedule, completion period etc.

19. Bids received after the due date and time shall be rejected and representative of such bidders shall not be allowed to attend the bid opening.

20. Consortium / Unincorporated Joint Venture Bids/ Multiple/Alternative bids shall not be acceptable.

21. Owner/EIL reserves the right to assess Bidder's capabilities and capacity to execute the work using in-house information. Further in case Purchase Order awarded for the tendered item(s)/ work have to be terminated due to supplier's default and separate enquiry have to be floated to get the remaining / complete item(s)/ work supplied/executed; such defaulting supplier will not be considered for enquiries issued for the refloated item(s)/works of the same project.

22. A bidder may seek clarifications regarding the bidding document provisions, bidding process and/or rejections of his bid. EIL shall respond to such requests within a reasonable time.

23. In case any bidder is found to be involved in cartel formation, his bid will not be considered for evaluation/ placement of order. Such bidder will be debarred from bidding in future.

24. Canvassing in any form by the Bidder or by any other Bidder on their behalf may lead to disqualification of their Bid.

25. The bidder shall bear all costs associated with the preparation and submission of its bid, site visit and other expenses incurred during bidding process. The Owner/EIL shall in no case be responsible or liable for such costs regardless of the conduct or outcome of the bidding process.

26. Owner/EIL reserves the right to reject any or all Bids received and to annul the Bidding Process at its discretion without assigning any reason, whatsoever.

27. Micro and Small Enterprises (MSEs) Order 2012 : For applicability of MSE Policy, Bidder to refer Bid Data Sheet (BDS).

28. Purchase Preference under PPP-MII Policy Order 2017 : For applicability of PPP-MII Policy, Bidder to refer Bid Data Sheet (BDS).

29. For detailed specifications, terms and conditions and other details, refer complete Bidding Document.

30. **Reverse Auction** : For applicability of Reverse Auction, Bidder to refer Bid Data Sheet (BDS).

31. Bidder to submit Pre-Bid queries within the cutoff date as specified in the Sl. No. (f) above. Bidder to ensure to submit their pre-bid query/ies through NIC/CPP Portal only [https://eprocure.gov.in/eprocure/app]. Pre Bid queries received through email/any other mode like hard copies shall not be given any cognizance. Also, Bidder to note that Pre-Bid queries reply/ies shall be published on NIC/CPP Portal only.

32. Non-disclosure Agreement (NDA) - For applicability of NDA, Bidder to refer Bid Data Sheet (BDS).

The RFQ along with Non-disclosure Agreement (NDA) format is uploaded on e-procurement Portal (https://eprocure.gov.in/eprocure/app). Bidder to download the NDA format and submit the same duly filled and signed. The acceptance/resubmission or rejection of NDA can be checked from e-procurement Portal and bidder whose NDA is considered acceptable can further download the Complete Bidding document, BOQ etc and Proceed for Bid Submission on e-procurement portal.

The Complete Bidding Document shall be issued to the bidders who have submitted the PDF format of NDA duly filled and signed on e-procurement portal (NIC/CPP Portal).

33. Engineers India Ltd / NRL including its officers and representatives, shall under no circumstances solicit or request any payment, monetary consideration from bidders other than those specifically stipulated in the published tender/enquiry document and its amendments (if any). Bidders are cautioned that, should they receive any phone calls, messages, emails, or personal approaches requesting payments other than specified in Tender Document, such communications are fraudulent and do not originate from Engineers India Ltd / NRL.

Engineers India Ltd / NRL shall not be responsible for any financial loss, penalty, or damage caused due to actions taken by Bidders/Contractors on the basis of such communications.

This limited invitation for e-bid is open only to suppliers to whom this RFQ is issued.

THIS IS NOT AN ORDER

Very truly yours,
(LOTAVATH THAVURYA)
GM (SCM-C&P)

Enclosures:

RFQ documents as specified below are available at **CPP Portal (https://eprocure.gov.in/eprocure/app)**

- **RFQ**
- **Bid Data Sheet**
- Instruction to Bidders (ITB)
  - Appendix-I: Pre-signed Integrity Pact **– Not Applicable**
  - Appendix-II: Purchase preference to micro or small enterprises (MSE)
  - Appendix-III: Public Procurement (Preference to Make in India) (PPP MII) Order 2017 and its amendments thereafter **– Not Applicable**
  - Appendix-IV: Domestically manufactured iron & steel Policy (DMI&SP) **– Not Applicable**
  - Appendix-V: Procurement from a bidder from a country sharing land border with India
  - Appendix-VI: Proforma for Bank Guarantee & Insurance Surety Bond
  - Appendix- VI-A: Bidder side Manual (for online EMD submission)-**Not Applicable**
  - Appendix-VII: Instructions to bidders for e-tendering

- Proposal Forms
  - Form-A Bidder's General Information
  - Form-B Bidder's Declaration

- ❖ Form-C Compliance to Bid requirement
- ❖ Form-D Salient features of Bid
- ❖ Form-E **Deleted**
- ❖ Form-F **Deleted**
- ❖ Form-G Bank Mandate Form
- ❖ Form-H **Deleted**
- ❖ Form-I Indemnity Bond cum Undertaking
- ❖ Form-J **Deleted**
- ❖ Form-K Bidder's Details- PAN, PF No. ESI Code, GSTIN
- ❖ Form-L Pre-bid Query format

- Agreed Terms and Conditions (Indian Bidder)
- Special Purchase Conditions
  - ❖ Annexure-I: Payment terms
  - ❖ Annexure–II: Taxes & duties
  - ❖ Annexure–III: Terms& conditions for post warranty annual maintenance contract
  - ❖ Annexure-IV: Terms & conditions for Indian sourced components/ services by foreign bidder
  - ❖ Annexure-V: Terms & conditions for supervision of erection, testing & commissioning / training at site
  - ❖ Annexure–VI: Terms & conditions for installation/ site work
  - ❖ Annexure–VII :Terms & conditions for training of owner personnel as per MR at vendor's works/ training facility
  - ❖ Annexure –VIII: Packing, Marking, Shipping and Documentation Specifications (for Imported Materials and Indigenous)
  - ❖ Annexure –IX Self Declaration of Conflict of Interest
  - ❖ Annexure –X Self Declaration of Debarment / Blacklisting / Holiday Listing & Allied Firms
- General Purchase Conditions – (GPC Indigenous)
- Price Schedule Format

MATERIAL REQUISITION NO. : C050-1P39A-YR-MR-1360 Rev A

BID DATA SHEET
(BDS)

BID DATA SHEET

S.NO.	ITB CLAUSE NO.	CONTENT
1.	**Clause No. 2 of ITB (ELIGIBLE BIDDERS)**	Enquiry Basis is Limited (Indigenous) Competitive Bidding.
2.	**Clause No. 7.0 of ITB (PRE-BID MEETING)**	Applicable
3.	**Non-disclosure Agreement (NDA)**	Not Applicable
4.	**Clause No.13.0 of SPC (TESTING AND INSPECTION)**	By NRL approved Third Party Inspection agency (TPIA)
5.	**Clause No: 12.0 of ITB (BID CURRENCY AND PAYMENT)**	**INR only**
6.	**Clause No: 15.0 of ITB (INTEGRITY PACT)**	**Not Applicable**
7.	**Clause No: 30.0 of ITB (EVALUATION & COMPARISON OF BIDS)**	The evaluation shall be on **Item wise Basis.** **Following shall be considered for the purpose of Item wise Price Evaluation, including loading of prices as per provisions of RFQ document :** **- Supply Price** **- Freight Charges till Project Site** Comparison Methodology shall be as per Clause No: 30 of ITB.
8.	**Clause No. 33 of ITB (PREFERENCE TO MICRO & SMALL ENTERPRISES)**	**Applicable**
9.	**Clause No. 34 of ITB (PUBLIC PROCUREMENT PREFERENCE TO MAKE IN INDIA (PPP-MII Oder 2017))**	**Not Applicable**
10.	**Clause No. 35 of ITB (POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON AND STEEL PRODUCTS IN GOVERNMENT PROCUREMENT(DMI&SP)**	**Not Applicable**
11.	**Clause No. 7 of SPC (PAYMENT TERMS)**	Payment terms shall be as per Annexure-I to SPC.
12.	**Clause No. 5 of SPC (TRANSPORTATION)**	Applicable.
13.	**Clause No. 15 of SPC (DELAYED DELIVERY)**	Applicable as per Clause No. 15.0 of Special Purchase Conditions.
14.	**Clause No. 16 of GPC (Indigenous) (REPEAT ORDER)**	Applicable
15.	**Clause No. 22 of SPC (PART ORDER)**	Applicable
16.	**Clause No. 40 of ITB (REVERSE AUCTION)**	Not Applicable
17.	**Clause No. 14 of SPC [CONTRACT PERFORMANCE SECURITY (CPS) AND WARRANTY BANK GUARANTEE (WBG)]**	CPS @ 3% of Total order value and WBG @ 7% of Total Order value.

18.	**POSTAL ADDRESS & CONTACT DETAILS FOR SUBMISSION OF DOCUMENT IN PHYSICAL FORM, IF ANY, AS PER RFQ**	The detail of Contact Persons for any query/clarification/communication, **Postal address** is: **Mr. LOTAVATH THAVURYA, GM (SCM)** **ENGINEERS INDIA LIMITED** **R&D COMPLEX, SECTOR-16 (On N.H.-8)** **TOWER-1 (2nd FLOOR),** **GURGAON-122 001** **HARYANA (INDIA)** Phone no. +91-124- 289 2509/1356/1379 **E-mail ID:** l.thavurya@eil.co.in/shashi.shekhar@eil.co.in /vaibhav.gunjal@eil.co.in

Annexure-A to BDS

Bid Security Declaration

(On Bidder's Letterhead)

To,
Numaligarh Refinery Limited,

Tender No. :
Name of Work/Job :

Dear Sir/ Madam,
After examining / reviewing provisions of above referred tender documents (including all corrigendum/ Addenda), we M/s ***....(Name of Bidder).....*** have submitted our Offer/ Bid no ,

We, M/s ***....(Name of Bidder).....*** hereby understand that, according to your conditions, we are submitting this Bid Security Declaration.

We understand that we will be put on holiday/ banning list (as per Holiday Listing Policy of Numaligarh Refinery Limited in this regard), if we are in breach of our obligation(s) as per following:

1. We withdraw or amend our tender suo-moto after opening of bid & within the period of bid validity; or
2. We impair or derogate from the tender in any respect within the period of validity of the tender; or
3. We do not accept the 'arithmetical corrections' of our bid price during evaluation, as per provision of tender document; or
4. We become successful bidder and fail to sign/ accept the contract, if awarded to us; or
5. We refuse or fail to furnish Contract Performance Security within the stipulated time as per tender/ LOA or within the extended time allowed by NRL (if any); or
6. We are found to have neglected/ abandoned the LOA/ contract; or
7. We refuse or fail to execute the awarded Contract as per the terms and conditions of the Contract; or
8. We are found to be having indulged in corrupt/fraudulent /collusive/coercive practice as per procedure; or
9. We commit any breach of tender conditions during execution of the contract.

This declaration is valid till the validity of our offer and shall extend automatically if the bid validity date is extended from our side.

For & on behalf of M/s [Name of the Bidder]

Signature :

Name :
Designation :
Date:
Company Seal :

POLYPROPYLENE UNIT (PPU) PROJECT AT NUMALIGARH REFINERY, NRL

INSTRUCTIONS TO BIDDER (ITB)

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1. SCOPE OF BID

1.1 Numaligarh Refinery Limited (NRL), is a Government of India Enterprise having its registered office at 122A, GS Road, Christian Basti, Guwahati-781005. NRL operates a 3.0 MMTPA Refinery and is augmenting the processing capacity of the facilities from present 3.0 MMTPA to 9.0 MMTPA under Numaligarh Refinery Expansion Project (NREP) at Numaligarh in the District of Golaghat, Assam since the year 2000.

1.2 NRL is setting up a Polypropylene (PP) Unit along with its associated facilities under Polypropylene (PP) project, beside the NREP refinery.

1.3 NRL hereinafter referred to as "Owner/Client" has appointed M/s Engineers India Ltd. (EIL) as Engineering, Procurement & Construction Management (EPCM) Services Consultant hereinafter referred to as "Consultant" and shall be the Engineer-in-Charge for Polypropylene (PP) Project at NRL, Assam hereinafter referred to as "Project".

EIL on behalf of NRL is authorized to enter into correspondence/ discussions & obtain any clarifications from the bidders.

1.4 SCOPE OF SUPPLY/ WORK: The scope of Supply/ Work shall be as defined in the Material Requisition (MR) included in the RFQ document. MR means the Technical part of RFQ Document.

1.5 The successful Bidder shall complete the Scope of Supply/ Work within the Time period/ Completion period stated in RFQ Document.

2. ELIGIBLE BIDDERS

Eligibility conditions are as under:

2.1 An Eligible bidder may be a firm or a company, who, have been issued the RFQ Document on Limited Competitive Bid Basis or a bidder meeting the Bidder Qualification Criteria (BQC) as per Invitation for Bids (IFB)/ Notice Inviting Tender (NIT) on Open Competitive Bid basis.

2.2 In case of Limited Competitive Bid basis, bid submission is allowed only to the bidders to whom RFQ Document has been issued.

2.3 In case of Open Competitive BFid basis, bid submission is allowed to the bidder who intends to submit their Bid, in response to IFB/NIT.

2.4 Bidder to comply with guidelines regarding procurement from bidders from a country or countries sharing Border with India issued vide O.M. No. 7/10/2021-PPD(1) dated 23.02.2023 of Department of Expenditure (Ministry of Finance) of Government of India. These guidelines are available on the website of DoE (https://doe.gov.in/procurement-policy-divisions).

2.5 Bidder to refer Purchase Preference (linked with local content) Policy in accordance with the provisions detailed in RFQ Document for eligibility.

2.6 Documents Establishing Bidder's Qualification

2.6.1 Pursuant to qualification criteria specified in IFB/NIT, the Bidder shall furnish all necessary supporting documentary evidence to establish the Bidder's claim of meeting qualification criteria to the Owner's/Consultant's satisfaction.

2.7 Black-list / Holiday List /Suspension / Banning List

2.7.1 Bidder should not be under liquidation, court receivership or similar proceedings. Bidder shall submit a self-certificate stating that they are not under liquidation, court receivership or similar proceedings failure to do so or the bidder is under, court receivership or similar proceedings, their bids shall not be considered.

2.7.2 A bidder who is on Black-list / Holiday List /Suspension / Banning List of Owner/EIL as on due date of submission of bid / during the process of evaluation of the bids, the offers of such bidders shall not be considered for bid opening/evaluation/award. Further, in case of a consortium, if any of the member(s) of consortium is on Black-list / Holiday List /Suspension / Banning List of Owner/EIL as on due date of

submission of bid / during the process of evaluation of the bids, the offers of such consortium shall not be considered for bid opening/evaluation/Award.

In limited enquiries, if the RFQ document were issued inadvertently/ downloaded from website, offers submitted by such Bidders shall not be considered for Bid opening/evaluation/Award.

Policy for Holiday listing/Banning/Debarring of Contractors/Suppliers of NRL is attached as Appendix IX to ITB. Bidder to submit self-declaration as per **Annexure XI to SPC**

2.7.3 Priced Bids shall not be opened in case bidder is on holiday list of EIL or NRL on the date of intimation to bidder for priced bid opening as well as on date of priced bid opening.

2.7.4 The information as per Clause 2.7.1 above, shall be submitted as per enclosed proposal **Form-B**. Non-submission of this undertaking duly filled in and signed shall render the Bid non- responsive and shall be rejected.

2.7.5 Bids by Consortium / Un-incorporated Joint Ventures are not acceptable unless specifically permitted in NIT/ IFB.

2.8 MSE Bidder:

MSE Bidder wherever specified in the Bidding Document shall mean the following and shall comply with the below stated requirements to enable EIL/NRL to consider give them the Benefits, as specified elsewhere in the Bidding Document:

a) MSEs shall provide the necessary valid document issued as evidence of registration by UDYAM. Only **Udyam Registration Certificate** for Micro & Small Enterprises shall be considered for availing the various benefits under Public Procurement Policy for MSE, 2012 (PPP-MSE, 2012).The Udyam registration certificate shall be verified from GoI Udyam registration portal (present web address is https://udyamregistration.gov.in).

b) The status of MSE Bidder as on close date of the tender shall be considered for applying above benefits for entire evaluation taking into account notification S.O. 4926(E) dated 18.10.2022 issued by Ministry of Micro, Small and Medium Enterprises, attached as **Appendix-II to ITB.**

c) Bidder participating as Trader / Agent etc. shall not be given any benefit as available under PPP-MSE, 2012.

d) In case, a MSE Bidder doesn't submit the MSE document or submits invalid document, such Bidders shall not be considered for providing benefits under PPP-MSE policy.

e) Bidder shall submit the declaration towards the above, as per proposal Form enclosed with the Bidding Document**.**

2.9 Conflict of Interest among Bidders/Agents:

A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

a) they have controlling partner(s) in common;

or

b) they receive or have received any direct or indirect subsidy/ financial stake from any of them;

or

c) they have the same legal representative/agent for purposes of this bid;

or

d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder;

or

e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid.

f) In cases of agents quoting in offshore procurements (GTE), on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following:

(i) The principal manufacturer directly or through one Indian agent on his behalf; and [in case of receipt of bids from both the Indian agent & the principal, the principal manufacturer shall be approached to arrange for withdrawal of one of the bids; in case of non-withdrawal, the bid from the principal manufacturer shall be considered]

(ii) Indian agent on behalf of only one principal.

g) Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid.

h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business.

2.10 **Quotation Received from Dealers/Agents for Items not Manufactured by Them:**

When a firm submit a quotation for an item manufactured by a different company, the firm is also required to attach in its quotation that manufacturer's authorisation certificate and also manufacturer's confirmation of extending the required warranty for that product (in addition to the tenderers' confirmation to the required warranty). If the firm is an authorised agent/dealer of that manufacturer, certified documentary evidence to this effect is to be attached along with the quotation. This is necessary to ensure a quotation from a responsible party offering the genuine product, also backed by a warranty obligation from the concerned manufacturer

3. ALTERNATIVE BIDS:

Bidder (i.e., the Bidding entity) shall, on no account submit more than one Bid either directly (as a single Bidder) or indirectly (as a sub-contractor) failing which following actions shall be initiated.

3.1 All Bids submitted by such Bidder (say 'A') as a single Bidder or as a consortium, shall stand rejected and BID SECURITY, if any, in case of all such Bids submitted by Bidder 'A' shall be forfeited

3.2 If another Bidder (say 'B') has proposed Bidder 'A' as a sub-contractor then Bidder 'B''s Bid shall also be rejected. However, in case the Bidder 'B' has also proposed an alternative sub-contractor who is other than the Bidder 'A', then Bidder 'B''s Bid shall be evaluated with the proposed alternative sub-contractor only. Hence, every Bidder shall ensure in his own interest that his proposed sub-contractor is not submitting alternative/ multiple Bids.

Note: In case a list of sub-contractors/ sub-vendors is specified in the Enquiry document itself,

which shall be common for all the Bidders, the provision at **Clause 3.2** above shall not be applicable as long as only the sub-contractors/ sub-vendors are common in case of various Bidders.

4. COST OF BIDDING

4.1 The Bidder shall bear all costs associated with the preparation and submission of the Bid, and Owner / Consultant, will in no case be responsible or liable for this cost, regardless of the conduct or outcome of the Bidding process.

5. SITE VISIT

5.1 The Bidder is advised to visit and examine the site and its surroundings and obtain for itself, at its own responsibility, all the information that may be necessary for preparing the Bid and entering into the Contract. The cost of visiting the site shall be at the Bidder's own expense.

5.2 The Bidder or any of its personnel or agents will be granted permission by the Owner to enter upon its premises and land for the purpose of such visits, but only upon the express condition that the Bidder, its personnel, and agents will indemnify the Owner and its personnel and agents from and against all liabilities in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

5.3 For site visit, Bidder may contact the following persons in EIL and NRL:

(i) *Resident Construction Manager*
Engineers India Limited,
Address:- Polypropylene Unit (PPU)
Numaligarh Refinery Limited,
P.O.: Numaligarh Refinery Complex
Dist.: Golaghat, Assam, India, PIN – 785621
Contact Details – MR. K SHIVAJI (Mob No. 9910691951) /
MR. RAVIRAJ K (Mob No.9599502472)/ MR. VVR MURTY (Mob No. 9958089907).

(ii) *Mr. Madhuchanda Adhikari, Head (Project Civil & Petchem)*
Numaligarh Refinery Limited
(A Government of India Enterprise)
NRL Complex, Numaligarh,
Dist: Golaghat, Assam-785699
Mob.No.9435054321
Email: *madhuchanda.adhikari@nrl.co.in*

6. CONTENTS OF BIDDING DOCUMENT

6.1 Details of the Tender can be viewed / downloaded from the following websites:

- E-Tendering website on CPP Portal of NIC URL: https://eprocure.gov.in/eprocure/app
- Bidders are required to upload & submit their e-Bid on above referred E Tendering website only.
- All updates, amendments, Corrigendum including Bid time extension, clarifications etc. (if any) will be uploaded / posted in the above websites only. There will not be any publication of the same through newspapers or any other media. Bidders should regularly visit the NIC/CPP websites to keep themselves updated.
- The link to download Bidding Document has also been hosted on website http://tenders.eil.co.in/newtenders/
- In case Non-Disclosure Agreement (NDA) with Licensor is applicable, Bidder is required to execute the NDA before they can view/download technical part of the bidding document from the e-tendering website. Bidder to note that submission of duly signed and stamped NDA strictly as per the format included in this Bidding Document without any deviation is mandatory, failing which Bidder(s) shall not be able to view/download technical part of Bidding Document.

6.2 The Bidder is expected to examine Bidding Documents, Bidding guidelines as available on E-Tendering website, all instructions, formats, terms, specifications and drawings etc., enclosed in the Bidding Documents. The invitation for Bid together with all its attachment thereto, shall be considered to be read, understood and accepted by the Bidder. Failure to furnish all information required by the Bidding Documents or submission of a Bid not substantially responsive to the Bidding documents in every respect will be at Bidder's risk and may result in the rejection of the Bid.

7. PRE-BID MEETING

7.1 Bidders in their own interest are advised to take part in the pre- bid meeting seriously by issuing their genuine queries and also by attending the pre-bid meeting by their competent personnel. This will help bidder not only to cut short of the evaluation time leading to requirement of shorter bid validity but also enable them to submit their best prices based on the clear techno-commercial scope.

7.2 Bidder's authorized representative(s) shall attend the pre-bid meeting on the prescribed day at the given venue as per details indicated in Bidding Document. During the pre-bid meeting, technical and commercial issues shall be discussed and Bidders shall ensure that the bid received subsequent to pre-bid meeting shall be without any deviations to terms and conditions. Hence, bidders shall treat the pre-bid meeting as utmost important and depute competent & senior person capable of taking on the spot decision to sort out the technical and commercial queries.

7.3 In case any bidder does not attend the pre-bid meeting, it shall be deemed considered that the bidder has a clear understanding of the scope & terms & conditions of the Bidding Document and does not have any comments/ deviations to the requirements of the Bidding Document.

7.4 In order to ensure fruitful discussions during pre-bid meeting, the bidder is requested to submit any queries/clarification/information pertaining to Bidding Document as per format enclosed **Proposal Form L** through NIC/CPP Portal at least three working days prior to Pre-bid meeting. These queries shall be replied during pre-bid meeting.

7.5 The bidders are required to participate in the pre-bid meeting after going through the entire Bidding Document along with BQC. Bidder shall come with all technical and commercial points on which they need clarifications and also to ensure that they possess all the supporting documentation for meeting the BQC. In case of any doubt, they may discuss the same during the meeting to avoid any techno-commercial clarifications/ discussions post bid.

7.6 The outcome of the pre-bid meeting, including the essential questions raised and the responses given by EIL/Owner shall be compiled as expeditiously as possible and shall be uploaded on the e-tendering website, if so required. After pre-bid meeting, EIL/Owner at its discretion may not entertain any further queries from the bidders. Replies to Pre-bid Queries are for the purpose of clarification only and shall not form part of Bidding Document and subsequent Contract.

7.7 Extension in bid due date shall not generally be granted due to tight Project Schedule.

7.8 Non- attendance of the pre-bid meeting will neither be a cause for disqualification of the bidder nor a cause for bidder's ignorance to submit the bid as per provisions of the bidding document and latest information uploaded in the Central Public Procurement Portal (CPPP)/Website of Government of India/ NIC Portal https://eprocure.gov.in/eprocure/app.

7.9 In case Non-Disclosure Agreement (NDA) is applicable, only those agencies who have executed NDA with Licensor, shall be allowed to attend Pre-bid meeting w.r.t. Technical Part/ Technical queries.

8. AMENDMENT OF BIDDING DOCUMENTS

8.1 At any time prior to the deadline for submission of Bids, the Owner/EIL may, for any reason, whether on its own requirement or in response to a clarification requested by the Bidders, modify the Bidding Documents by issuing / publishing amendment (also named as Addendum / Corrigendum).

8.2 Any amendment thus issued shall form part of the Bidding Documents. The amendment will be published on e-Tendering Portal. Bidders have to take into consideration of all the amendment (s) published on e-Tendering portal before submitting their Bid.

8.3 The Owner may, at its discretion, extend the date of submission of Bids in order to allow the Bidders a

reasonable time to furnish their most competitive Bid taking into account all the amendments published.

9. LANGUAGE OF BID

9.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and EIL, shall be in the English language. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language, in which case, for purposes of interpretation of the Bid, such translation shall govern.

9.2 If any of the documents in support of meeting BQC are not in English language, then the English translation copy of the same duly certified, stamped and signed by Local Chamber of Commerce shall be furnished along with the document in the un-priced bid. Translation by Indian Embassy/ High Commission or authorized/ approved translation agencies (by Indian embassy/ high commission or any other authority) shall also be acceptable.

10. DOCUMENTS COMPRISING THE BID

10.1 No Physical Bids / Offers shall be permitted (other than the documents which are specifically mentioned to be submitted in physical form for which scanned copy already uploaded along with the bid). The offers/bids submitted online through e-procurement portal shall only be considered as bid for evaluation and ordering. Bidders are required to upload the Bid/offer along with all supporting documents including Priced bid on the e-tendering website only. Electronic Bids (e-bid) shall be submitted in PART-I for Techno-commercial/ Unpriced bid and PART- II for Priced bid as detailed below.

10.2 Bidders to upload the Un-priced and Price part of their bids strictly in the Un-priced & Priced folders respectively at the designated place in the e-tender portal. Non- Compliance to the same may lead to rejection of their offer.

10.3 The Bid shall be submitted in two parts viz. Part-I & Part-II in respective area provided in the e-tendering website as per the following.

10.3.1 TECHNO-COMMERCIAL/UNPRICED BID (PART-I)

a) Covering letter of Bid on Bidders letter head.

b) Covering page of all technical and commercial amendments, if any.

c) Price Schedule with prices blanked out mentioning “Quoted / Not Quoted” against each item.

d) Duly filled singed & stamped Agreed Terms & Conditions (Indigenous/ Import)

e) Documents substantiating meeting of Technical BQC as per IFB. **[only in case of open competitive bidding (NIT / IFB)]**

f) Documents substantiating meeting of Financial BQC [audited Annual Financial Statements including Auditor’s Report, Balance Sheets, Profit and Loss Accounts statements, Notes & schedules etc. of the immediate preceding 3 (Three) financial years] as per NIT/IFB. **[only in case of open competitive bidding (NIT / IFB)]**

g) General Information, as per **Proposal Form-A**

h) Declaration, as per **Proposal Form-B**.

i) Compliance to Bid Requirement, as per **Proposal Form-C**.

j) Salient Features of Bid, as per **Proposal Form-D**.

k) Integrity Pact as per **Appendix-I to ITB** (if applicable as per BDS), duly signed and stamped on each page by the signatory holding Power of Attorney.

l) Power of Attorney (POA) in favor of person(s) signing/ e-signing the bid that such person (s) is/are authorized to sign the bid on behalf of the bidder and any consequence resulting due to such signing shall be binding on the bidder in accordance with Clause 11.0 of ITB, as per **Proposal Form F [only in case of open competitive bidding (NIT / IFB)]**

m) Bank Mandate Form, as per **Proposal Form-G.**

n) Affidavit for Domestically Manufactured Iron & Steel Policy (DMI&SP) in accordance with attached DMI&S Policy **(Form-1 to Appendix-IV to ITB)**, if applicable as per BDS.

o) Public Procurement-Preference to Make in India (PPP-MII Policy) : Bidder to submit declaration as per Format-2A, 2AA & 2C (as applicable) of **Appendix-III to ITB** for claiming the PPP-MII benefit, Bidder shall submit Format 2B of Appendix-III to ITB i.e. certification by statutory auditor / cost auditor / practicing cost accountant / practicing chartered towards local content (when total Procurement value is INR 10 Crore or above) **or** Format-2A, 2AA & 2C (as applicable) i.e. self-certification on their letter head (when total procurement value is less than INR 10 Crore) duly signed and stamped and certified as per the instructions provided therein.

p) All technical documents required as per Material Requisition.

q) Signed and stamped copy of **Form-A (on Company's Letterhead) attached with Appendix-V of this ITB** in line with Government guidelines regarding procurement from bidders from a country or countries sharing Border with India.

r) Deleted

s) Bidder's Financial Details as per **Proposal Form J**

t) Self-declaration of black listing / holiday listing as per **Annexure XI to SPC**.

u) Self-declaration of Conflict of Interest as per Format enclosed as per **Annexure X to SPC.**

v) Details of PAN, PF Number, ESI Registration Code in **Proposal Form K** [**only in case of open competitive bidding (NIT / IFB)]**

w) Valid GSTIN/UIN registration certificate / GSTIN Number alongwith Indemnity bond cum undertaking **as per Proposal Form-I**

(NRL at its discretion may not consider the bidders bid for further evaluation if the same is not found uploaded with the bid or not found to be valid in GST portal. Any misinterpretation or misinformation may attract penal action including putting the bidder on holiday / blacklisting as per rules in vogue at NRL.)

x) Copies of documents defining constitution or legal status, place of registration and principal place of business of the Company **[only in case of open competitive bidding (NIT / IFB)]**

Organization details

(i) In case of a proprietorship firm, the name & address of proprietor, certified copy of Bank Account Details and proprietorship affidavit.

(ii) In case bidder is a partnership firm, certified copy of the partnership deed.

(iii) In case of company (whether private or public), certified copy of the 'Certificate of Incorporation' together with certified copy of Memorandum/ Articles of Association.

y) Signed & Stamped copy of T&C of Supervision of Erection/Testing & commissioning/ Training at Site, T&C of Training of Owner's personnel at vendors works/ Training facility (as applicable)

aa) Signed & stamped copy of T&C for Site Work, T&C for Annual maintenance Contract (as applicable)

bb) Any other information required in the RFQ/ Bidding Documents/ BDS.

Note:

i. The above shall be uploaded in **"UNPRICED/ TECHNICAL"** folder in e-tendering portal.

ii. Bidder must ensure that price(s) shall not be disclosed/mentioned in their unpriced part of bid. Any price indicated in unpriced bid shall not be taken into cognizance.

10.3.2 **PRICE BID (PART-II)**

Containing only prices duly filled in the prescribed price schedule format provided in the RFQ Document, consisting of the following:

a) Prices in Price Schedule Format (available in the **BoQ format** which is uploaded on e-tendering portal).

Note:

i. Part-II shall be uploaded in **"FINANCE"** folder in e-tendering portal

ii. No stipulation, deviation, terms and conditions, presumptions, basis etc shall be stipulated in Price part of bid. In case of any conditions stipulated in price bids are in deviation to terms & conditions as stipulated in unpriced bids, then the bids of such bidders shall be summarily rejected and shall not be considered for further evaluation. Evaluation of the bids shall be carried out excluding such bidder(s).

iii. All documents uploaded in the e-tendering portal shall be deemed considered digitally signed documents by the authorized signatory of the bidder holding Power of Attorney.

iv. The Institute of Chartered Accountant of India at its 379th council meeting dated 17-18th December, 2018 made generation of Unique Document Identification Number (UDIN) mandatory for every signature of full time practicing chartered accountant for the following service:

a) All certificates with effect from 1st February, 2019.
b) GST and Income Tax audit with effect from 1st April, 2019.
c) All audit and assurance functions with effect from 1st July, 2019.

In view of the above, bidder shall ensure that any certificate / reports issued / attested by a practicing chartered accountant in India and submitted in the bid shall mandatorily include the UDIN number. Certificate / reports issued / attested without UDIN number of practicing Chartered accountant in India shall not be considered for evaluation.

This requirement of including UDIN shall not be applicable for certificate / reports issued / attested by a chartered accountant practicing in foreign country.

11. BID PRICES

11.1 Prices shall be furnished strictly in the Price Schedule format(s)/BOQ enclosed with the Bidding document. Quoted prices shall be net of discount, if any. Conditional discounts, if offered by a Bidder, shall not be considered for evaluation.

11.2 All duties, taxes, and other levies shall be as per Special Purchase Conditions.

11.3 The Bidder shall quote the price for item in the Price Schedule after careful analysis of cost involved for the performance of complete work considering all parts of the RFQ/Bidding Documents. In case, any activity though specifically not covered but is required to complete the work as per scope of work, scope of supply, specifications, standards, drawings, GPC, SPC or any other part of RFQ/Bidding Document, the prices quoted shall deemed to be inclusive of cost incurred for such activity.

11.4 Indian Bidder shall quote the prices considering Customs and Customs related duty for their import

content in accordance with provision of SPC. Bidder shall ascertain the applicable rate of customs duty and shall be solely responsible towards applicability and correctness of such rates. The evaluation shall be carried out based on the rates of customs duty quoted by the bidder. However, for ordering, lower of the Customs duty rate quoted by bidder or the applicable rate of Customs Duty shall be considered and accordingly order price shall stand reduced to extent of reduction in Customs and customs related duty on CIF value. The Bidder(s) must indicate quantity, CIF value & rate of custom duty considered in the Price Schedule.

11.5 **Testing and Inspection charges**:
Goods and Services shall be subject to stage wise and final inspection by Third Party Inspection (TPI) agency. The TPI charges shall be included in quoted prices, and no additional charges shall be paid by Owner. Similarly, all built in import content (if applicable) shall also be subject to inspection by TPI agencies listed in the SPC, in the country of origin of the import content, and charges for the same are included in quoted prices, and no additional charges shall be paid by Owner. However, wherever Inspection by EIL is specified as per approved Inspection Test Plan (ITP) enclosed with Material Requisition (MR), the same shall be carried out by EIL without any additional cost to supplier and charges for the same are not to be included in quoted prices by bidder.

12. BID CURRENCY AND PAYMENT

12.1 Bidding currency shall be in Indian Rupees (INR).

13. BID VALIDITY

13.1 The Bid shall remain valid for the period of **120 days** from the final bid due date. Owner/EIL shall reject a Bid valid for a shorter period being non-responsive.

13.2 Bidders shall not be entitled during the above period, without the consent of EIL/NRL in writing, to revoke or cancel their Bid or to vary the Bid given or any term thereof or to submit new deviation. In case of Bidders revoking/withdrawing or cancelling their Bid or varying any terms in regard thereof without the consent of NRL/EIL in writing, their Bid shall be rejected and Bid security, if any, shall be forfeited. Such Bidder may also be put on Holiday/ Suspension/ banning list, as applicable of EIL/NRL as per their existing policy in this regard.

NRL/EIL, at its sole discretion, may give an opportunity to the Bidder to withdraw the deviation(s) unconditionally.

13.3 In exceptional circumstances, prior to expiry of the original Bid validity period, the Owner/EIL may request that the Bidder extend the period of validity for a specified additional period. The requests and the responses thereto shall be made in writing (by -post/e-mail).

13.4 Any Bidder who does not extend the Bid Validity, such Bids shall be rejected & not considered for further evaluation.

14. CODE OF INTEGRITY FOR PUBLIC PROCUREMENT (CIPP)

14.1 Procuring authorities as well as bidders, suppliers, contractors and consultants should observe the highest standard of ethics and should not indulge in the following prohibited practices, either directly or indirectly, at any stage during the procurement process or during execution of resultant contracts:

(i) "Corrupt practice": making offers, solicitation or acceptance of bribe, rewards or gifts or any material benefit, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process or contract execution;

(ii) "Fraudulent practice": any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefits may be obtained or an obligation avoided. This includes making false declaration or providing false information for participation in a tender process or to secure a contract or in execution of the contract;

(iii) "Anti-competitive practice": any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act, 2002, between two or more bidders, with or without the knowledge of the procuring entity, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels;

(iv) "Coercive practice": harming or threatening to harm, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

(v) "Conflict of interest": participation by a bidding firm or any of its affiliates that are either involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in the procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any official of procuring entity who are directly or indirectly related to tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from the procuring entity with an intent to gain unfair advantage in the procurement process or for personal gain; and

(vi) "Obstructive practice": materially impede the procuring entity's investigation into allegations of one or more of the above mentioned prohibited practices either by deliberately destroying,

falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements to investigators and/or by threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or by impeding the procuring entity's rights of audit or access to information;

14.2 Obligations for Proactive Disclosures

(i) Procuring authorities as well as bidders, suppliers, contractors and consultants, are obliged under Code of Integrity for Public Procurement to suo-moto proactively declare any conflicts of interest (coming under the definition mentioned above - pre-existing or as and as soon as these arise at any stage) in any procurement process or execution of contract; and

(ii) Any bidder must declare, whether asked or not in a bid document, any previous transgressions of such a code of integrity with any entity in any country or of being debarred by any other procuring entity.

(iii) To encourage voluntary disclosures, such declarations would not mean automatic disqualification for the bidder making such declarations. The declared conflict of interest may be evaluated and mitigation steps, if possible, may be taken by the procuring entity.

14.3 Punitive Provisions: Without prejudice to and in addition to the rights of the procuring entity to other penal provisions as per the bid documents or contract, if the procuring entity comes to a conclusion that a (prospective) bidder/supplier, directly or through an agent, has violated this code of integrity in competing for the contract or in executing a contract, the procuring entity may take appropriate measures including one or more of the following:

(i) if his bids are under consideration in any procurement

a) Forfeiture or encashment of bid security

b) calling off of any pre-contract negotiations, and;

c) rejection and exclusion of the bidder from the procurement process

(ii) if a contract has already been awarded

a) Cancellation of the relevant contract and recovery of compensation for loss incurred by the procuring entity;

b) Forfeiture or encashment of any other security or bond relating to the procurement;

c) Recovery of payments including advance payments, if any, made by the procuring entity along with interest thereon at the prevailing rate;

(iii) Provisions in addition to above:

a) Banning/ debarment of the bidder from participation in future procurements of the procuring entity for a period; as specified in the NRL's policy for holiday listing Banning/ Debarring of Contractors/ Suppliers.

b) Initiation of suitable disciplinary or criminal proceedings against any individual or staff found responsible.

15. INTEGRITY PACT

15.1 Integrity Pact duly signed by authorized representative of NRL is attached **as Appendix- I to this ITB**. All pages of the Integrity Pact are to be returned by the bidder (along with the unpriced bid) duly signed by the same signatory who signed the bid, i.e. who is duly authorized to sign the bid and to make binding commitments on behalf of his company. Any bid of estimated value of Rs. 1 Crore and above not accompanied by Integrity Pact duly signed by the bidder or the bidder not agreeing to submit a copy of the signed integrity pact shall be considered to be a nonresponsive bid and shall be rejected. Bidder shall not retype or use any IP other than signed IP provided with the Bidding Document.

15.2 Non-submission of Integrity Pact and non-adherence to the IP, shall lead to rejection of the Bid. In case of Bid submitted by any partnership firm or Consortium bidder, Integrity Pact must be signed by all Partners/ Consortium members.

15.3 If the Bidder has been disqualified from the tender process prior to the award of the Order in accordance with the provisions of the Integrity Pact, NRL shall be entitled to demand and recover from Bidder Liquidated Damages amount by forfeiting the EMD/Bid Security as per provisions of the Integrity Pact.

15.4 If the Order has been terminated according to the provisions of the Integrity Pact, or if NRL is entitled to terminate the Order according to the provisions of the Integrity Pact, NRL shall be entitled to demand and recover from Vendor Liquidated Damages amount by forfeiting the Security Deposit/Performance Bank Guarantee as per provisions of the Integrity Pact.

15.5 Bidders may raise disputes/complaints, if any, with the nominated Independent External Monitors as per Integrity pact. Details of Independent External Monitors is as per **Appendix- I to ITB.**

16. POWER OF ATTORNEY

Bidder shall submit a **Power of Attorney (POA)** in the name of authorized signatory who is submitting the bid with his Digital Signature Certificate & signature, as mentioned below:

16.1 **COMPANY:** Bid shall be signed by a duly authorized person holding Power of Attorney for signing the Documents as per the proforma attached as per **Proposal Form- F**.

Alternatively, in case Bid signatory has General Power of Attorney or has the power as per their Board resolution, the same shall be submitted duly certified by Notary Public or CEO/CFO/Company Secretary (CS)/Member of Board of Directors.

In case, Bid is signed by CEO/CFO/CS/any member of board of Directors, no separate POA is required, provided the documentary evidence of their being CEO/CFO/CS/any member of board of Directors is reflected in the MOA/AOA/Financial Statements, else to be submitted separately in the Bid.

Bidder shall also submit the copy of Memorandum of Association (MOA) / Articles of Association (AOA) of the Company.

16.2 **PARTNERSHIP FIRM**: Bid shall be signed by all the partners of the Firm. Alternatively, the Bid shall be signed by any Partner holding Power of Attorney as specified in the Partnership Deed, OR Bid can be signed by an authorized person and shall submit a specific POA for the tender duly signed by all the Partners, as per the proforma attached as per **Proposal Form-F**, duly signed by all the Partners.

Bidder shall submit the copy of **Partnership Deed.**

16.3 **Limited Liability Partnership (LLP) Entity**: Bid shall be signed by the person holding Power of Attorney as per the registered LLP Agreement for the Firm, OR, has the power as per their Board resolution, OR, as per the proforma attached as per **Proposal Form-F**, duly signed by all the LLP Partners.

Bidder shall submit **(i)** a copy of **LLP Agreement**, and **(ii)** a copy of **Certificate of Incorporation**.

16.4 **One Person Company**: Bid shall be signed by the Person Owning the Company. Bidder shall also submit a copy of (i) PAN card, (ii) Bank Mandate Form, duly certified by the Bidder's Banker, and (iii) a copy of Certificate of Incorporation /registration.

16.5 **Proprietorship**: Proprietor shall sign the Bid.

Bidder shall also submit a copy of (i) PAN card and (ii) Bank Mandate Form, duly certified by the Bidders Banker.

16.6 **Unincorporated Joint Venture/Consortium:** Both members of the consortium shall authorize the Lead Member of the consortium with the authority to bind the consortium, through a Power of Attorney given jointly by all the members to the Lead Member.

Both Leader as well as Member of the Consortium/JV shall also submit a separate POA from their respective Company/ Firm in the name of the signatory signing the Consortium/JV Agreement. Depending on the formation/ registration/ constitution (Company/ Firm, etc.) of the Leader/Member of the Consortium/JV, POA shall be submitted in a manner, as applicable, as per the above clauses.

16.7 **For Indian Bidder**, the proforma attached in the Proposal Forms shall be on non-judicial **stamp paper** of minimum value of **INR 100/-** and duly Notarized by a Notary Public in India.

17. ZERO DEVIATION BID

17.1 Bidders to note that Bidding Document is issued on Zero deviation basis. Bids shall be submitted as Zero deviation Basis. Accordingly offer is to be submitted in complete compliance to Terms & Conditions of Bidding Document without any deviation. Offer with deviation may be liable for rejection without any further correspondence in line with provisions of ITB.

18. SUBMISSION OF BIDS

18.1 No Physical Bids / Offers shall be permitted. Bidders are required to upload the Bid/ offer along with all supporting documents including Priced Bid on E-Tendering Portal https://eprocure.gov.in/eprocure/app only and the offers/Bids submitted online through this Portal shall only be considered for evaluation and ordering. Refer Appendix-VII to ITB for INSTRUCTIONS TO BIDDERS FOR E-TENDERING.

19. DEADLINE FOR SUBMISSION OF BID

19.1 The E-Bids must be submitted on or before the last date and time mentioned in the RFQ Document.

19.2 The Owner/EIL may, in exceptional circumstances and at its discretion, on giving reasonable notice to all prospective Bidders, extend the deadline for the submission of e-Bids in which case all rights and obligations of the Owner /EIL and Bidders, previously subject to the original deadline will thereafter be subject to deadline as extended.

19.3 Accordingly, Bid Due Date (BDD) means the final due date and time of submission (dead line of submission) of Bid including the extensions (if any) thereof.

20. LATE BIDS / UNSOLICITED BIDS / BID SUBMISSION AT OTHER PLACE

20.1 No Bid will be received after the deadline of submission of Bid.

20.2 Unsolicited Bids or Bids being submitted to address other than one specifically stipulated in the Bid documents will not be considered for opening / evaluation / award.

20.3 Unsolicited bids received from the bidders who were not issued the enquiry shall not be opened.

21. MODIFICATION AND WITHDRAWAL OF BIDS

21.1 The Bidder may modify or withdraw its Bid after the Bid's submission but prior to the due date prescribed for submission of Bids.

21.2 No Bid shall be modified subsequent to the deadline for submission of Bids.

21.3 No Bid shall be allowed to be withdrawn in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity.

21.4 **There are two specific features in CPP viz, "Withdraw" and "Re-Submission". Bidders should not use the feature "withdraw" unless they have decided to withdraw their bids for non-participation in the bidding process. It is to be noted that once "withdraw" feature is used they will not be allowed to re-submit their bid against this RFQ. In case a Bidder desires to change/resubmit his bid for any reason before bid due date, Bidder shall use "Re-Submission" feature.**

22. OWNER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY BID

22.1 The Owner/EIL reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to award of the order without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidder or Bidders of the ground for Owner/EIL's action.

23. UNPRICE BID OPENING

23.1 The un-priced Bids shall be opened online through E-Tendering portal, at the specified date and time given in the RFQ Document or extended otherwise.

23.2 Bidders can view the bid opening details online at their respective places, there will be no separate public opening and the bidders shall not be called for attending the bid opening.

23.3 Only name(s) of the Bidders who has/have submitted the Bid(s) shall be visible to the Bidders.

24. CLARIFICATION REQUESTS FROM BIDDERS

24.1 A bidder may seek clarification regarding the Bidding Document provisions, bidding process and/ or rejection of his bid. NRL/EIL may respond in writing to any request for any information or clarification or query on the bidding conditions, bidding process and/or rejection of its bid -directly to the concerned bidder or by publishing in the e-tendering portal - depending on the nature & content of the information/clarification sought. However, such information relating to the evaluation of bids and recommendation of award shall not be disclosed to any other persons not officially concerned with the bidding process.

24.2 Bidder shall examine the bidding document thoroughly in all respect and if any conflict, discrepancy, ambiguity, error or omission is observed, bidder may request information/ clarification of the bidding document in writing so as to reach office of NRL not later than 07 days prior to the last date for submission of bids.

24.3 Right of Bidder to question rejection at Techno-commercial Stage:

A tenderer shall have the right to be heard in case he feels that a proper procurement process is not being followed and/or his Techno-commercial bid has been rejected wrongly. The tenderer is to be permitted to send his representation in writing. On receipt of representation, it may be decided whether to withhold opening of the financial bids and bidder may be expeditiously replied.

Certain decisions of the procuring entity in accordance with the provision of internal guidelines shall not be subject to review as mentioned in para 39.5 below.

25. CONTACTING THE OWNER / OWNER REPRESENTATIVE

25.1 From the time of the Bid opening to the time of the award, if any Bidder wishes to contact EIL for any matter relating to the Biding process, it should be done in writing only.

25.2 Any effort by a Bidder to influence the Owner/EIL in any manner in respect of Bid evaluation or award will result in the rejection of that Bid.

26. EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS

26.1 The Owner/EIL will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, and whether the Bids are generally in order.

26.2 Prior to the detailed evaluation, the Owner/EIL will determine whether each Bid is of acceptable quality, is generally complete and is responsive to the RFQ/Bidding Documents.

26.3 A substantially responsive Bid is one which conforms to all the terms & conditions, specifications etc. of the Tender Document without any material deviation or reservation or omission subject to provisions of commercial loading as specified in RFQ Document. For this purpose Purchaser defines the foregoing terms below :-

a) "Deviation" is departure from the requirement specified in the Tender Documents.

b) "Reservation" is the setting of limiting condition(s) or withholding from complete acceptance of the requirement in the Bidding Document.

c) "Omission" is the failure to submit part or all of the information or documentation required in the Tender Document.

d) A material deviation, reservation or omission is one that, If accepted would,

i) Affect in any substantial way the scope, quality or performance of the job as specified in the Tender Document.

ii) Limit, in any substantial way, inconsistent with the Tender Document, the Owner/EIL"s rights or the Bidder"s obligation under the proposed Contract.

iii) If rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids

26.4 Bidder shall not be allowed to submit any Price Implication or Revised Price after submission of Bid. In case Exceptions and Deviations submitted by Bidder along with Bid are not considered as acceptable, then in such a case the Bidders would be required to withdraw such Exceptions/Deviations in favour of stipulations of the RFQ/ Bidding document and Bidders would not be eligible for submission of Price Implication/Revised Price, failing which such Bid(s) shall be considered as nonresponsive and rejected.

26.5 The Owner/EIL determination of a Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence. If a Bid is not responsive, it will be liable for rejection by the Owner/EIL.

27. PRICE CHANGES / IMPLICATIONS AFTER OPENING OF TECHNICAL BIDS

27.1 Any Price implication after final Bid Due Date is not permitted. In case of any suo moto change in price, following shall apply:

Stage	Price Increase	Price Decrease
After opening of unpriced bid	Not Acceptable, Bid shall be rejected without offering any opportunity to the bidder to withdraw the same, Action regarding Holiday Listing may be taken.	In case of suo moto price decrease: 1. Tender evaluation shall be done without considering suo moto decrease. 2. Ordering shall be done considering suo moto decrease.

28. PRICE BID OPENING

28.1 The Owner/EIL shall inform the time and date for price Bid opening to all such Bidders who qualify & are accepted pursuant to Bid evaluation.

28.2 The Owner/EIL will open price bids online. The Bidders who qualify & are accepted pursuant to Bid evaluation shall be able to view online the prices of all other Bidders who qualify & are accepted pursuant to Bid evaluation at their respective windows, after price Bid opening by Owner/EIL.

28.3 If after the opening of price bids, it is observed that the bidder has not indicated the prices in the price bid, the bid of such bidder shall be considered as non-responsive and shall be rejected.

29. ARITHMETIC CORRECTIONS

29.1 Bidders shall accept correction of arithmetical errors and shall be binding on him. Failure to accept the correction, shall result in the rejection of the Bid and Bid Security, if any, shall be forfeited.

29.2 If there is correction / wrong entry or a difference between the values entered in figures and in words, the following procedure shall be adopted for evaluation.

i. When there is a difference between the rate in figures and in words for an item, the rate which corresponds to the amount worked out by the Bidder for the item based on the notional quantity specified, shall be taken as correct.

ii. When the rate quoted by the Bidder in figures and words tallies but the amount is incorrect, the rate quoted by the Bidder shall be taken as correct.

iii. When it is not possible to ascertain the correct rate as detailed above, the rate quoted for the item in words shall be adopted as the quoted rate.

29.3 If the total amount written against an item does not correspond to the rate written in figures and if the rate in words is not written by the bidder, then the higher of the rates, i.e. higher of the rate worked out by dividing the amount by the notional quantity and the rate quoted shall be considered for evaluation. In the event that such a bid is determined as the lowest bid, the lower of the rates shall be considered for ordering.

30. EVALUATION & COMPARISON OF BIDS

30.1 Bids shall be evaluated on the basis of net effective price, i.e., landed cost at site including transportation/ Supervision/ Site work/ etc. as applicable as per Scope of MR. Following costs, taxes, duties etc., as applicable, shall be used for evaluation of bids:

- Basic ex-works cost (including special tools and tackles),
- Cost of mandatory and commissioning spares, if any
- Third party inspection (TPI) and Other Inspection charges, if extra
- Packing & Forwarding charges [P&F], if extra {Biodegradable packing material should preferably be used for supply of materials}
- All taxes and duties applicable in India
- Freight charges upto Refinery (Stores) / Project site
- Testing charges,
- Site work charges, if applicable
- Site supervision services charges (for number of days as mentioned in Bidding Document), training charges, if applicable
- PWAMC charges, if applicable
- Technical loadings, if any, as defined in MR/Technical section
- Loading for cylinder rental charges, if applicable
- Any other charges indicated by the bidder

30.2 **Evaluation against tenders where only Indian Bids are under comparison**

Bids shall be evaluated after considering prices quoted for the components relevant to indigenous supplies as indicated in Clause No. 30.1 above.

a. Site supervision services for the number of days specified in RFQ Document shall be considered for evaluation.

b. Bidders shall have to quote firm freight charges upto Refinery (Stores) / Project site.

c. If a supplier/bidder does not quote freight charges and indicates that the freight is on to pay basis or “extra at actual” then his FOT Despatch point price shall be loaded with the maximum freight charges quoted by other bidders or pro-rated (with respect to approximate distance on maximum

freight charges quoted by other bidders or by 5% (for items other than pipes) or 7% (for pipes), whichever is more. After loading, if the same Bidder becomes L1 (lowest) then the order will be placed based on Freight Charges payable extra at actual subject to maximum freight charges by which the prices of the L1 bidder has been loaded.

d. When a bidder does not mention anything about the freight component, the same shall be considered as "nil" and no further confirmation from bidder/supplier shall be sought. Evaluation and ordering shall be done considering freight charges as Nil.

e. If bidder has mentioned freight as "quoted" in the unpriced bid / Annexure to Agreed terms & Conditions (ATC) but has not mentioned freight charges in priced bid / stated the Percentage Freight in Annexure to ATC, then the basic price quoted shall be considered as inclusive of freight charges and no further confirmation from bidder/supplier shall be sought. Evaluation and ordering shall be done considering freight charges as Nil.

f. Where bidder has quoted firm freight charges, documentary evidence of freight is not required. Bidder shall be paid as per freight quoted by them.

g. In case of ODC/OWC bidders shall have to mandatorily quote for freight upto Refinery (Stores) / Project site. In case the bidder does not quote the freight charges, their offer shall be liable for rejection of which NRL shall be the sole judge.

h. Bids shall be evaluated on the basis of landed cost / total cost at Site including third party inspection charges by TPI Agency, transportation charges and applicable taxes & duties. Inland Transit Insurance shall be considered @0.5% for evaluation.

i. In case TPI by EIL, to calculate landed cost, notional loading at the rate of 1.25% of FOT Dispatch Point Price on account of TPI shall be considered.

j. Bids shall be evaluated on the basis of net effective price, i.e., Total landed cost at site including transportation/ Supervision /Site work/ etc. as applicable as per Scope of MR as mentioned below:

SR. No.	TERMS AS PER RFQ	LOADING FACTOR
1.	FOT Dispatch Point Price	As quoted
2.	Cost of mandatory spares identified in the Material Requisition, commissioning Spares and special tools & tackles (Prices for recommended 2 years Operation & Maintenance spares is excluded)	As quoted (if sought extra)
3.	Freight charges	As quoted
4.	GST on Supply, Mandatory Spares & Freight	As applicable
5.	Total Price for Supplies at Site including GST	**SUM OF SR. Nos. (1+2+3+4)**
6.	Services: Price for Site Work/ Supervision/ Training/ 3-D Modelling/ Hazop Study/ AMC (if applicable)	As quoted
7.	GST on Site work/ Supervision/ Training/ 3-D Modelling/ Hazop Study/ AMC Price	As applicable
8.	Total Price for Services including GST	**SUM OF SR. Nos. (6+7)**
9.	Technical & Commercial loadings, if any	As applicable
10.	Prices for additional Guarantee period shall be considered for price evaluation, if required as per MR/ RFQ	As quoted by the bidder + GST as applicable
11.	Inspection by EIL (if applicable as per ITP) – Notional Loading	@ 1.25% on Sl. No. 1

12.	Inland Transit Insurance- notional loading	@ 0.5% on Sl. No.1+2
13.	Total Landed Cost at site	**SUM OF SR. Nos. (5+8+9+10+11+12)**

30.3 **General**

a. Bids shall be evaluated on item wise lowest basis/Groupwise or Bottomline basis, as mentioned in enquiry.

b. The evaluation and ordering shall be carried out considering the rates of GST as quoted in the bid.

c. Corrections in any errors/ omissions in rates or applicability in statutory taxes/ duties applicable on goods & services which are required to be quoted extra as per provisions of bidding document shall not be considered as price implications and shall be permissible so far as such corrections are based on reply to clarification(s) raised on the bidder. However, wherever no clarification(s) is raised, the evaluation shall be carried out based on taxes and duties/ HSN code quoted by the Bidder.

d. In case, in unpriced bid, bidder has indicated 'Quoted / % indicated' against Freight charges but the same is found blanked in Priced part then the Freight charges shall be considered as included in quoted price. In case in the un-priced bid, it appears that bidder has not quoted Perdiem charges for any services such as Supervision, AMC, Training etc. or indicated as "Extra at actuals" then the bid shall be rejected.

e. Suo moto price discounts and discounts for prompt payments shall not be used for evaluation.

f. In case of tie between two or more parties (even after consideration of applicable preferences for MSE / Local content, discount etc.), it shall be resolved through:-

(i) In cases where the tender explicitly declares the items as non-splitable, and an extreme situation arises when there is a 'TIE' based on the evaluated price (after loadings, if any) recourse shall be taken on the basis of bidder's maximum average annual turnover during the last 3 years. For this purpose, audited / CA certified turnover documents of the last 3 years shall be considered for calculating average annual turnover of the bidders having tie. The bidder whose average annual turnover is highest shall be the recommended bidder.

Note : If a Bidder does not submit the aforementioned financial statements for three specified years, then Average Annual Turnover will be calculated based on financial figures of only those specified years for which requisite financial statements are submitted. Turnover will be considered '0' (Zero) for the year(s) for which requisite financial statements are not submitted.

It may also be decided that in case the successful agency as selected above refuses or fails to execute the supply/service after award, the quantities or unexecuted quantities may be subsequently offered to any of the other L1 agencies (not awarded any qty. so far), adopting appropriate selection process by NRL like lottery among the remaining interested agencies [in case of (i) above] or wait listed agencies determined in the original lottery [(ii) above].

- In case of "refusal", subsequent award to next eligible agency shall be done within original or extended offer validity.

- In case of "failure", unexecuted quantities shall be offered to the next eligible agency within maximum one year from the original date of award.

Defaulting supplier/contractor shall be subject to penalties as per procedure.

g. Prices for Post Warranty Annual Maintenance Contract (PWAMC), if any mentioned in Material Requisition/Technical Specifications/Scope of Tender or equivalent term, shall be considered for evaluation. However, Purchase order for PWAMC shall be placed separately by NRL.

h. Evaluation shall take into consideration Government of India guidelines with respect to Purchase Preference applicable to MSEs/ PPP-MII as well as any other applicable Government of India Guidelines.

i. Canvassing in any form will make the bid liable for rejection

j. **Shifting:** For the purposes of shifting, cost of order management per order is considered as INR 2 lakh. Based on lowest evaluated item wise prices the shifting shall be carried out provided the following conditions are met:

i. Shifting shall be done only if shifting cost of each order is upto INR 2 lakh.
ii. Shifting shall not be resorted to if the value of the order is more than 25% of the total order value of the recommendation. However, this ceiling will not be applicable where total order value of recommendation is upto INR 8 Lakh.
iii. In case the order value on L1 bidder is more than INR 5 lakh then shifting shall not be resorted.
iv. If L1 bidder is MSE bidder, shifting shall be resorted with MSE Bidder Consent.

With above shifting the selected bidder for award will be deemed to be L1 bidder.

31. QUANTITY VARIATION

31.1 The Owner/EIL reserves the right to vary the quantity of goods, as specified in MR, without any change in quoted unit price or other terms and conditions.

31.2 Owner/EIL reserves the right to delete the requirement of any one or more items of MR without assigning any reason.

32. PRICE CHANGES / IMPLICATIONS AFTER OPENING OF PRICE BIDS

32.1 After opening of price bid, if the bidder increases the price, though within the validity period and even though the offer remains lowest the bid should be rejected. Bid Security of such Bidder shall be forfeited and Bidder shall be debarred for future enquiries for such action of bidders as a penal measure.

32.2 Suo-moto Price reduction after price bid opening are to be ignored for evaluation. However, if the bidder happens to be the lowest based on original price bids, the benefit of such reduction may be availed of while placing order.

33. PURCHASE PREFERENCE TO MICRO OR SMALL ENTERPRISES

Refer Appendix –II to ITB

34. PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA)

Refer Appendix – III to ITB

35. POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT (DMI&SP),

Domestically Manufactured Iron & Steel Products in Government Procurement (DMI&SP) shall be as per Appendix -IV to ITB.

36. PROCUREMENT FROM A BIDDER FROM A COUNTRY SHARING LAND BORDER WITH INDIA

Applicable as per Appendix -V to ITB

37. NEGOTIATION

Negotiations will not be conducted with the bidder as a matter of routine. However, NRL reserves the right to conduct negotiations.

37.1 Bidder is expected to quote after careful analysis of costs involved for the performance of the complete item considering all specifications and conditions of contract. This will avoid loss of profit or gain in case of curtailment or change of specification for any item. Further, NRL shall not analyze the workability of the prices quoted by the bidder. The bidder shall be solely liable for any and all loses,

whether direct or consequential, in this regard, and NRL disclaims any and all liabilities in this regard.

Prior to award, NRL/EIL may require confirmation for the following:

(i) They have read the tender terms and conditions and understood the scope of work completely;

(ii) They shall execute the job at their offered rate without any deviation to the tendered specification; and

(iii) They shall be able to complete the job within the scheduled time.

Failure to provide unconditional confirmation to any and/or all of the above points shall be treated as withdrawal of offer and necessary action under NRLs Holiday Listing Policy shall be initiated.

38. AWARD OF WORK

38.1 NRL shall place Purchase Order to the bidder(s) who has (have) been determined to be the lowest successful bidder(s) for item(s)/ Group(s) of MR as per the Item-wise / Group-wise ordering philosophy defined in RFQ / Price Schedule.

39. NOTIFICATION OF AWARD

39.1 Prior to the expiration of period of Bid validity, Owner /EIL will notify the successful Bidder (s) in writing by e-mail to be confirmed in writing, that his Bid has been accepted. The notification of award / Letter of Acceptance (LOA) will constitute the formation of the Purchase Order.

39.2 The Delivery Schedule shall commence from the date of Notification of Award / Letter of Acceptance (LOA).

39.3 LOA will contain price, delivery and other salient terms of Bid and RFQ Document.

39.4 Bidder will be required to confirm receipt of the same by returning "Copy of the LOA" duly signed and stamped by the Bidder as a token of acknowledgement to Owner and EIL. On receipt of acknowledgement without any deviation / condition and on submission of CPS (if applicable) as per GPC, digitally signed detail Purchase Order will be issued by Owner. Copy of the same without any condition / deviation will be returned duly signed and stamped by the Bidder as a token of acknowledgement to Owner and EIL.

39.5 Bidder's right to question rejection at this stage:

A tenderer shall have the right to be heard in case he feels that a proper procurement process is not being followed and/or his tender has been rejected wrongly. The tenderer is permitted to send his representation in writing to the following officials of NRL:

Mr. Rupam Kumar Sarmah, GM (Project Tech Process),
Numaligarh Refinery Limited
(A Government of India Enterprise)
NRL Complex, Numaligarh,
Dist: Golaghat, Assam-785699
Email: rupam.k.sarmah@nrl.co.in.
Mob.No.9435703129

The procuring entity should ensure a decision normally within 15 (fifteen) days of the receipt of the representation. Only a directly affected bidder can represent in this regard:

(i) Only a bidder who has participated in the concerned procurement process i.e. prequalification, bidder registration or bidding, as the case may be, can make such representation

(ii) In case pre-qualification bid has been evaluated before the bidding of Technical/ financial bids, an application for review in relation to the technical/ financial bid may be filed only by a bidder who has qualified in pre-qualification bid;

(iii) In case techno-commercial bid has been evaluated before the opening of the financial bid, an application for review in relation to the financial bid may be filed only by a bidder whose technical bid is found to be acceptable

(iv) Following decisions of the procuring entity in accordance with the provision of internal guidelines shall not be subject to review:

a) Determination of the need for procurement;

b) Selection of the mode of procurement or bidding system;

c) Choice of selection procedure;

d) Provisions limiting participation of bidders in the procurement process;

e) The decision to enter into negotiations with the L1 bidder;

f) Cancellation of the procurement process except where it is intended to subsequently re-tender the same requirements;

g) Issues related to ambiguity in contract terms may not be taken up after a contract has been signed, all such issues should be highlighted before consummation of the contract by the vendor/contractor; and

h) Complaints against specifications except under the premise that they are either vague or too specific so as to limit competition.

40. REVERSE AUCTION

Reverse Auction is Not applicable.

41. BASKET CONCEPT IN PURCHASING

41.1 Bidder shall be asked to quote group wise price along with breakup of Group price or item wise price for each Group. If in the Unpriced Bid, the bidder does not mention "Quoted" against any of the item(s) of the Group(s), then that Group(s) shall not be considered for further evaluation. However, if in the unpriced part, Bidder indicates that prices are quoted for all items for the Group(s) but in the Price Bid no price is indicated against any item(s) of the Group, then the Total prices of the Group shall be considered inclusive of price of that item.

41.2 It is clarified here that for grouped/ basket/ block, if any item not quoted, the offer shall be rejected for that group/ basket/ block without any CQ/ TQ.

41.3 In case, the above is discovered post priced bid opening, such bidder's bid shall not be considered for evaluation for the corresponding group/ block or entire MR/ tender, if there is only one single group/ block. In such an event, the lowest bidder shall be determined out of the remaining bidders.

41.4 No repeat ordering shall be considered for items ordered as a basket unless the entire basket has to be repeat ordered.

42. SPARES

42.1 MR shall include list of mandatory spares, wherever required, clearly indicating quantity required and shall be considered in the evaluation. All such spares quoted by suppliers against the specified MR requirement will be evaluated and recommended for ordering with the main equipment.

42.2 Commissioning spares and special tools and tackles, if required and mentioned in MR, will be considered for price evaluation and recommended for ordering as quoted by Suppliers. However, Supplier shall be fully responsible and no additional cost / time shall be paid / given by NRL in case commissioning spares / special tools & tackles over & above those quoted by supplier are required.

42.3 Bidders shall quote their recommended two years' operation and maintenance spares with 2 years validity from the date of Supply of Main Items/ Equipment. however, the same will not be considered for price evaluation. These will be selected and ordered by NRL separately as and when required.

43. WAIVER OR TRANSFER OF THE AGREEMENT

43.1 The successful Bidder shall not waive the Agreement or transfer it to third parties, whether in part or in whole, nor waive any interest that is included in the Agreement without the prior written permission of the Owner.

44. CARTEL FORMATION

44.1 In case any Bidder is found to be involved in cartel formation, his Bid will not be considered for evaluation /placement of order. Such Bidder will also be debarred from Bidding in future.

INTEGRITY PACT

(Updated format w.e.f. 20.08.2025)

NOTE TO BIDDER:

a. Proforma of Integrity Pact(enclosed) shall be returned by the Bidder(s) along with the bid documents (technical bid in case of 2 part bids), duly signed by the same Signatory who is authorised to sign the bid documents. All the pages of the Integrity Pact shall be duly signed. Bidder's failure to return the IP duly signed shall result in the bid not being considered for further evaluation.

b. If the Bidder has been disqualified from the tender process prior to the award of the contract in accordance with the provisions of the Integrity Pact, NRL shall be entitled to demand and recover from Bidder Liquidated Damages amount by forfeiting the EMD / Bid Security as per provisions of the Integrity Pact.

c. If the contract has been terminated according to the provisions of the Integrity Pact, or if NRL is entitled to terminate the contract according to the provisions of the Integrity Pact, NRL shall be entitled to demand and recover from Contractor / Supplier Liquidated Damages amount by forfeiting the Security Deposit / Performance Bank Guarantee as per provisions of the Integrity Pact.

d. Bidders may raise disputes / complaints, if any, with the Independent External Monitor(s) through telephone and email followed by written document or telephone and written document. However date of receipt of complaint shall be the date of receipt of signed written document only.

Name / address / e-mail ID / contact number(s) of Independent External Monitors appointed to oversee implementation of Integrity Pact Programme at NRL are mentioned below.

Name & Address of Independent External Monitors for Monitoring / Implementation of Integrity Pact

1. Shri Pidatala Sridhar, IRS (Retd.)
Flat 2C, Kanaka Lakshmi Apartments,
3-6-467 &468, Street number 6,
Himayat Nagar, Hyderabad, Pin-500029
Email: sridharpidatala@gmail.com

2. Shri Kishore Kumar Sansi, Ex- MD & CEO, Vijaya Bank
B-301, Badhwar Apartments,
Sector -6, Plot No. 3, Dwarka,
West Delhi, New Delhi -110075
Email: kishoresansi1@gmail.com

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गोलाघाट, असम-७८५६९९ / Golaghat, Assam-785699

INTEGRITY PACT

Between

Numaligarh Refinery Limited (NRL) hereinafter referred to as "The Principal",

And

.....hereinafter referred to as "The Bidder/Contractor/Supplier"

Preamble

The Principal intends to award, under laid down organization procedures, contract/s for.....

.....

The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s, Contractor/s and Supplier/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organisation "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an Independent External Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

a) No employee of the Principal, personally or through family members, will in connection with the tender, or the execution of the contract, demand, take a promise for or accept, for himself/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

b) The Principal will, during the tender process, treat all Bidders with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential / additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.

c) The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder / Contractor/Supplier

(1) The Bidder / Contractor/Supplier commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

a) The Bidder / Contractor/Supplier will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person, any material or immaterial benefit which

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he/she is not legally entitled to, in order to obtain in exchange, any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b) The Bidder / Contractor/Supplier will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.

c) The Bidder / Contractor/Supplier will not commit any offence under the relevant Anti-Corruption Laws of India; further the Bidder / Contractor/Supplier will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d) The Bidder / Contractor/ Supplier, either while presenting the bid or during pre-contract negotiations shall disclose any payments he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

e) If the BIDDER or their personnel have financial or business relationships with any official of procuring entity who are directly related to tender or execution process of the contract or such official has any personal interest in the bidding firm, the same shall be disclosed by the BIDDER at the time of filing of tender or during pre-contract negotiations.

f) The Bidder / Contractor/ Supplier who have signed the Integrity Pact shall not approach the courts while representing the matter to IEMs and shall wait for their decision on the matter.

(2) The Bidder / Contractor/Supplier will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder, before contract award, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

(1) If the Bidder/Contractor/Supplier has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is also entitled to exclude the Bidder / Contractor/Supplier from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

(2) A transgression is considered to have occurred if the Principal after due consideration of the available evidences, concludes that no reasonable doubt is possible.

(3) The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

(4) If the Bidder / Contractor/Supplier can prove that he has restored / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

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Section 4 - Compensation for Damages

(1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit/Bid Security.

(2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor/Supplier liquidated damages equivalent to Security Deposit / Performance Bank Guarantee.

(3) The Bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder / Contractor/Supplier can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder / Contractor/Supplier shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous Transgression

(1) The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders / Contractors /Suppliers/ Subcontractors

(1) The Bidder/Contractor/Supplier undertakes to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors/Suppliers and Subcontractors.

(3) The Principal will disqualify from the tender process all Bidders who do not sign this Pact or violate its provisions.

Section 7 – Punitive Action against violating Bidders / Contractors / Suppliers / Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor, Supplier or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor, Supplier or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - Independent External Monitors

(1) The Principal has appointed competent and credible Independent External Monitors for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.

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(3) The Bidder/Contractor/Supplier accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Bidder/Contractor/Supplier. The Bidder/Contractor/Supplier will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to this project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Supplier/ Subcontractor with confidentially.

(4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Bidder/Contractor/Supplier. The parties offer to the Monitor the option to participate in such meetings.

(5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendation. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Independent External Monitor shall give an opportunity to the Bidder/Contractor/Supplier to present its case before making its recommendations to the Principal.

(6) The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

(7) If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

(8) The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor/Supplier 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairperson of the Principal.

Section 10 - Other provisions

(1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Guwahati. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(3) If the Bidder / Contractor/ Supplier is a joint venture, a consortium or a partnership firm, this agreement must be signed by all partners / members of the concern. In case of sub-contracting, the Principal contractor shall take responsibility of the adoption of IP by the sub-contractor. It is to be ensured that all sub-contractors also sign the IP. In case of sub-contractors, the IP will be a tri-partite arrangement to be signed by the Organization, the contractor, and the sub-contractor.

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(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

.....
For the Principal

.....
For the Bidder/Contractor/ Supplier

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Place .....

Witness 1 : .....
(Signature/Name/Address)

Date .....

Witness 2 : .....
(Signature/Name/Address)

APPENDIX-II TO ITB

Policy for Micro and Small Enterprises (MSEs) & Start-Ups

Information to bidders on NRL's Policy for Micro and Small Enterprises (MSEs) & Start-Ups

Job Name :

Tender No. :

SPECIAL CONDITIONS FOR MICRO AND SMALL ENTERPRISES (MSEs) BIDDERS :

With reference the Public Procurement Policy for Micro and Small Enterprises (MSEs) Order 2012 notified by the Government under the Micro, Small and Medium Enterprise Development Act, 2006 and subsequent amendments through following notifications:

- Notification S.O. 5670(E), dtd. 9th November, 2018
- Ministry of MSME letter D.O. No. 21(8)/2018-MA dated 13th November, 2018
- MoP&NG letter ref. No. J-25011/35/2016-Gen dated 15th November, 2018
- Gazette Notification no. 2119(E) dated 26.06.2020
- FAQs issued by Development Commissioner (MSME) OM F.No. 1(3)/2018-MA, Part-III dated 25th March, 2022
- Notification S.O. 4926(E) dated 18.10.2022 issued by Ministry of MSME
- DoE OM No. F 1/4/2021-PPD dated 18.05.2023 on concurrent application of PPP-MSE (order 2012) and PPP-MII (order 2017)
- MSME D.O. No. P-11/3/2023-Policy-DCMSME) dtd. 28.3.2025 (Gazette notification S.O. 1364(E) dtd. 21.03.2025

Micro and Small Enterprises (MSEs) shall be entitled for benefits, subject to terms and conditions as under:

A. Qualifying Criteria for MSE Bidder:

i) MSE bidder has to mandatorily submit a copy of Udyam Registration Certificate (https://udyamregistration.gov.in).

ii) If the bidder fails to submit Udyam Registration Certificate in the original offer, the bidder may not be considered for evaluation as MSE.

iii) The Udyam Registration Certificate shall be valid. The certificate may be verified online during the bid evaluation and particulars submitted must be found to be valid in the Udyam website.

B. Additional Qualifying Criteria for SC/ST MSE Bidder:

In order for MSE owned by SC/ST Entrepreneurs to qualify for benefits available under Public Procurement Policy for MSEs (order 2012) to SC/ST Entrepreneurs, the "Social Category" in Udyam Registration Certificate should state "SC" or "ST".

Bidder must include the relevant page of Udyam Registration Certificate wherein the social category of the entrepreneur is mentioned.

C. Additional Qualifying Criteria for MSE Bidders owned by Women Entrepreneurs:

Micro & Small Enterprises shall be considered as owned by Women Entrepreneurs as per the below definition:

- In case of proprietary MSE, proprietor should be Women.
- In case of partnership MSE, the Women partner(s) should be holding at least 51% shares in the unit.
- In case of Limited companies, at least 51% share should be held by Women shareholder(s).

In order for MSE owned by Women Entrepreneurs to qualify for benefits available under Public Procurement Policy for MSEs (order 2012) to Women Entrepreneurs, the MSE shall additionally submit notarized copy of the following:

- In case of a proprietorship firm, the name and address of proprietor, and certified copy of Bank Account Details or Cancelled Cheque.
- In case bidder is a partnership firm, certified copy of the partnership deed.
- In case of company (whether private or public), certified copy of the `Certificate of Incorporation' together with certified copy of Memorandum/Articles of Association
- Self-certification by the women owner declaring herself as women owner of the MSE

The above documents shall not be required to qualify for aforementioned benefits when the Udyam registration certificate submitted by the bidder clearly mentions the "Gender" of the MSE and can also be verified online without restriction.

D. Benefits Under The Public Procurement Policy for Micro and Small Enterprises (MSEs) Order 2012

1. **Issue of Tender Sets Free of Cost**
   All Tenders shall be provided free of cost and tender documents are downloadable from the Central Public Procurement Portal (CPPP) **http://eprocure.gov.in/eprocure/app** or GeM portal or can be obtained from the Office of General Manager (Commercial). NITs are also published in NRL Website **www.nrl.co.in**

2. **Exemption from payment of EMD (Earnest Money Deposit)**
   MSE units meeting the qualifying criteria (point A above) shall be exempted from paying EMD, if EMD is applicable against the tender.

3. **Price preference for MSE Bidder:**

i) In tender, participating Micro and Small Enterprises quoting price within price band of L1+15% (evaluated price) shall also be allowed to supply a portion of requirement by bringing down the price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise and such Micro and Small Enterprise shall be allowed to supply up to 25 percent of total tendered value. [*Refer point F(i) for applicability*]

Matching of L1 price shall be offered to MSEs in the sequence of their ranking (i.e., L2, L3, L4 and so on).

In case of more than one such MSE within the L1+15% band, the supply shall be shared proportionately (to tendered quantity) provided such MSE bidders matches the L1 price.

ii) In case of tender item is non-splitable or non-dividable, etc. MSE quoting price within price band L1+15% may be awarded for full/complete supply of total tendered value to MSE, considering spirit of policy for enhancing the Government procurement from MSE, provided they agree to bring down their price to L1 price.

iii) NRL reserves the right to allow micro and small enterprises as well as MSEs owned by SC/ST entrepreneur and MSEs owned by Women, purchase preference as admissible under the prevailing procurement policy for MSEs.

iv) **For Supply of Goods only:**

- The quantity against the tender may be split to enable ordering of 25% of tender quantity to MSE bidder(s) within the price range of L1 bidder's price + 15% subject to their matching L1 bidder's evaluated price. [*Refer point F(i) for applicability*]

- In case where tender quantity can be split and MSE vendor is already getting order for more than 25% of the tender value by being L1 or through matching L1 price, no additional purchase preference is required to be given in that tender. In such cases, the sequence of matching L1 bidder's price shall start from the splitable item with highest amount onwards. Once 25% of the tender value is achieved for MSE vendor(s), no additional purchase preference is required to be given in that tender.

- The quoted prices by bidders against various items of tender shall remain valid in case of splitting of quantities to MSE bidder.

- Out of this 25% allocation for MSEs, 4% shall be to MSEs owned by SC/ ST entrepreneurs. However, in event of failure of MSEs owned by SC/ ST entrepreneurs to participate in the bidding process or meet the tender requirements and L1 price, 4% will be met from other MSEs.

- Additionally, out of above 25% allocation to MSEs, 3% shall be to MSEs owned by Women. However, in event of failure of MSEs owned by Women to participate in the bidding process or meet the tender requirements and L1 price, 3% will be met from other MSEs.

- While granting purchase preference as above, procurement of goods may include certain small work, or some services, which are incidental or consequential to supply of such goods such as transportation, insurance, installation, commissioning, training & maintenance.

Clarification:

- *In case where quantity against a line item cannot be split (i.e., 25% to MSEs) or items with single quantity or in grouped item, the complete line item/ group shall be awarded on MSE bidder within the price range of L1 bidder's evaluated price + 15% subject to their matching L1 bidder's price.*

- *In case, quantity(ies) against an item/ group cannot be split among MSEs, first opportunity shall be given to*
  - *MSEs owned by Women*
  - *then to MSEs owned by SC/ ST entrepreneurs, and*
  - *lastly to other MSEs, within the price range of L1 non-MSE bidder's evaluated price + 15%.*
- *In cases where MSE bidder in order of preference indicated above refuses to accept the L1 price, opportunity shall be provided to the other bidders in above order of preference and so on.*

v) **For Services only:**

- *In case the tendered scope cannot be split, the complete scope of Services shall be awarded on MSE bidder within the price range of L1 bidder's evaluated price + 15%, subject to their matching L1 bidder's price.*

- *In case, besides general MSEs, MSEs owned by SC/ ST and/ or MSEs owned by Women are within the price range of L1 bidder's evaluated price + 15%, first opportunity shall be given to*
  - *MSEs owned by Women*
  - *then to MSEs owned by SC/ ST entrepreneurs, and*
  - *lastly to other MSEs, within the price range of L1 non-MSE bidder's evaluated price + 15%.*

- *In cases where MSE bidder in order of preference indicated above refuses to accept the L1 price, opportunity shall be provided to the other bidders in above order of preference indicated above.*

vi) In case purchase preference is applicable, but negotiation is to be conducted with L1 bidder, negotiation shall be carried out. Price range within 15% shall be considered for MSE bidders based on the original prices of L1 bidder not on the negotiated prices. However, MSE bidder shall be offered to match the negotiated prices (even if, post negotiation, they are higher by more than 15% as compared to L1 bidder, provided they were within 15% of L1 bidder as per original quoted prices).

vii) **For Supply of Goods as well as Services:**
In case when the contract is awarded to an MSE bidders matching the L1 price refuses or fails to execute the supply/service after award, the quantities or unexecuted quantities may be subsequently offered to any of the other MSE bidders (not selected for award so far, and falling within the price band of L1+15%), in the sequence of their ranking (i.e., L3, L4 and so on) subject to their matching the evaluated L1 price. In absence of such MSE bidder, the quantity may be offered to the original L1 agency (non-MSE).
- In case of "refusal", subsequent award to next eligible agency shall be done within original or extended offer validity.
- In case of "failure", unexecuted quantities shall be offered to the next eligible agency within maximum one year from the original date of award.

Defaulting supplier/contractor shall be subject to penalties as per procedure.

E. Relaxation of Past Tract Record (PTR) for MSEs and Start ups

- The Pre-Qualification Criteria (PQC) related to prior turnover and prior experience of the bidder will be relaxed if the bidder is Micro or Small Enterprise as per latest definitions under MSME rules or Startups and meets the quality and technical specifications described in the tender, subject to submission of valid supporting documents by the bidder. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded with his bid for evaluation by the buyer.
- As per Department of Expenditure's OM No.F.20/2/2014-PPD dated 20.09.2016, relaxation regarding the prior turnover and prior experience is applicable only to all startups recognized by Department of Industry & Internal Trade (DPIIT), subject to meeting of quality and technical specifications.
  An entity shall be considered as a 'start-up'-
  a) Up to ten years from the date of its incorporation/ registration.
  b) If its turnover for any of the financial years has not exceeded Rs 100 (Rupees Hundred) crore
  c) It is working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation
  d) Provided further that in order to obtain benefits a Startup so identified under the above definition shall be required to be recognized as Startup by DPIIT.
- This waiver of prior turnover and prior experience will not be applicable for items related to public safety, health, critical security operation and equipment's etc.
- If PTR for MSEs is not completely waived off but proposed to relax the same up to certain extent compared to PQC set for other non MSE bidders, in such cases, prior experience may be partially relaxed, however, prior turnover will remain waived off.

F. Applicability of the Policy

i) For a participating bidder, MSE status shall be considered for purchase (price) preference in respect to procurement of goods and services only, if the vendor is registered as MSE. If the bidder wants to avail themselves of the Purchase

preference, the bidder must be the manufacturer / OEM of the offered product. Traders/Distributors/Sole Agents are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documents in this regard shall be uploaded along with the bid in respect of the offered product or service and buyer will decide eligibility for purchase preference based on documentary evidence submitted, while evaluating the bid.

ii) Policy meant for procurement of only goods produced and service rendered by MSEs. However, traders /resellers /distributors /authorized agents will not be considered for availing benefits under Public Procurement Policy 2012 for MSEs, except exemption from payment of EMD.

iii) Public Procurement Policy is applicable for supply of goods and services. Works contract is not covered under the PP Policy for MSME. Accordingly, the clause D 3 (Price preference for MSE bidder) and clause E (Relaxation of past track record (PTR) for MSEs and Startups) as mentioned above will not be extended to works contracts.

iv) The provisions for MSE bidders mentioned in this document shall be applicable for limited enquiries as well as NITs.

G. Providing MSE benefits to Medium category bidders

As per amendment made in Micro, Small and Medium Enterprises Development Act, 2006 vide S.O. 2119(E), dated the 26th June, 2020, and published in Govt. of India gazette notification dated 18th October 2022.
The notification states that - " (5) In case of an upward change in terms of investment in plant and machinery or equipment or turnover or both, and consequent re-classification, an enterprise shall continue to avail of all nontax benefits of the category (micro or small or medium) it was in before the re-classification, for a period of three years from the date of such upward change."

Further it was clarified vide Press Release published on 19th October 2022 in Govt of India website https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1869091 that, - " Non-tax benefits include benefits of various schemes of the Government, including Public Procurement Policy, Delayed Payments, etc."

Therefore, a Medium category bidder can claim for benefits provided to MSEs as per our tender conditions, provided the bidder is eligible by meeting the conditions stipulated in the gazette notification stated above.

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रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

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भाग II—खण्ड 3—उप-खण्ड (ii)
RT II—Section —Sub-section (ii)

प्राधिकार से प्रकाशित
LIS E T RIT

सं. 1 नई दिल्ली, मंगलवार, अक्तूबर 1 , 2022/आश्विन 2 , 194
o. 1 EW EL I, T ES , CT ER 1 , 2 22/ S I 2 , 1

सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय

अधिसूचना

नई दिल्ली अक्तूबर 2022

का.आ. 4926**(अ).**—केन्द्रीय सरकार सूक्ष्म लघु और मध्यम उद्यम विकास अधिनियम 2006 (2006 का 27) की धारा 7 की उप धारा (9) के साथ पठित उप धारा (1) और धारा 8 की उप धारा (3) के साथ पठित उप धारा (2) के द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए भारत सरकार के सूक्ष्म लघु और मध्यम उद्यम मंत्रालय की अधिसूचना संख्यांक का.आ. 2119(अ) तारीख 26 जून 2020 जो भारत के राजपत्र असाधारण भाग II खंड 3 उपखंड ( ) में प्रकाशित की गई थी का और निम्नलिखित संशोधन करती है अर्थात् :-

उक्त अधिसूचना में पैरा 8 के उप पैरा (5) के स्थान पर निम्नलिखित उप पैरा रखा जाएगा अर्थात् :-

"(5) संयंत्र और मशीनरी या उपस्कर में निवेश में उच्चतर परिवर्तन अथवा और टर्नओवर में उच्चतर परिवर्तन तथा परिणामस्वरूप पुन:वर्गीकरण की स्थिति में कोई उद्यम उस प्रवर्ग (सूक्ष्म या लघु या मध्यम) से ऐसे उच्चतर परिवर्तन की तारीख से तीन वर्ष की अवधि के लिए उन सभी गैर-कर लाभों का उपयोग करता रहेगा जैसा कि वह पुन:वर्गीकरण से पहले कर रहा था ।"

फा. सं. पी-05/1/2022-जीईएन

शैलेश कुमार सिंह अपर सचिव एवं
विकास आयुक्त (एमएसएमई)

टिप्पण : मूल अधिसूचना संख्यांक का.आ. 2119(अ) तारीख 26 जून 2020 द्वारा भारत के राजपत्र भाग II खंड 3 उपखंड ( ) में प्रकाशित की गई थी और तत्पश्चात् संख्यांक का.आ. 1055(अ) तारीख 5 मार्च 2021 का.आ. 2347(अ) तारीख 16 जून 2021 का.आ. 278(अ) तारीख 19 जनवरी 2022 और का.आ. 2134(अ) तारीख 6 मई 2022 द्वारा संशोधित की गई थी ।

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MI ISTR F MICR , SM LL ME I M E TER RISES

TIFIC TI

New Delhi, the 18th October, 2022

S. . 2 (E).—In exercise of the powers conferred by sub-section (1) read with sub-section (9) of section 7 and sub-section (2) read with sub-section (3) of section 8 of the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006), the Central Government hereby makes the following further amendments in the notification of the Government of India, Ministry of Micro, Small and Medium Enterprises number S.O. 2119(E), dated the 26th June, 2020, published in the Gazette of India, Extraordinary, Part-II,Section 3, Sub-section (ii), namely:-

In the said notification, for sub-paragraph (5) of paragraph 8, the following sub-paragraph shall be substituted, namely:-

"(5) In case of an upward change in terms of investment in plant and machinery or equipment or turnover or both, and consequent re-classification, an enterprise shall continue to avail of all non-tax benefits of the category (micro or small or medium) it was in before the re-classification, for a period of three years from the date of such upward change.".

[F. No. P-05/1/2022-GEN]

SHAILESH UMAR SINGH, Addl. Secy.
and Development Commissioner (MSME).

ote The principal notification was published in the Gazette of India, Extraordinary, Part-II, Section 3, Sub-section (ii) *vide* number S.O. 2119 (E), dated the 26th June, 2020 and subsequently amended *vide* numbers S.O. 1055(E), dated the 5th March, 2021, S.O. 2347(E), dated the 16th June, 2021, S.O. 278(E), dated the 19thJanuary, 2022 and S.O. 2134(E), dated the 6th May, 2022.

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and Published by the Controller of Publications, Delhi-110054.

APPENDIX-III TO ITB

Policy to provide Purchase Preference linked with Local Content (PP-LC) under Make in India (PPP-MII) Order, 2017

Policy to provide Purchase Preference linked with Local Content (PP-LC) under Make in India (PPP-MII) Order, 2017

1. Ministry of Petroleum & Natural Gas (MoPNG) vide letter No. **FP-20013/2/2017-FP-PNG-Part (4) (E-41432) dated 26.04.2022** issued directive that Public Procurement (Preference to Make in India) (PPP-MII) Order, 2017 issued by DPIIT and as amended from time to time, shall be applicable to all the Public Sector undertakings under MoPNG w.e.f. 01.04.2022.

The letter further directed that, as per Para 14 of the PPP-MII Order, the following modifications in the order shall be applicable on procuring entities under MoPNG:

a. Limit for exemption of small purchase under para 4 of the PPP-MII Order, 2017 shall be Rs. 1 crore.
b. Local value addition through services such as transportation, insurance, installation, commissioning, and training and after sales services support like AMC/ CMC etc. shall continue to be considered in local content calculations.
c. HP-HT operations in upstream oil and gas business activities shall be exempted from applicability of the order.

2. Accordingly, excepting the 03 modifications as directed above, the latest Order issued by the Department for Promotion of Industry and Internal Trade (DPIIT) i.e., Order No. **P-45021/2/2017-PP (BE-II)-Part(4)Vol.II dated 19.07.2024** shall be currently applicable for tenders under this procuring entity.

3. Further, Ministry of Finance, Department of Expenditure (DoE), vide OM No. **F 1/4/2021-PPD dated 18.05.2023** has issued guidelines on concurrent application of PPP-MSE Order 2012 and PPP-MII Order 2017. These guidelines shall be applicable for tenders under this procuring entity.

4. Further, MoPNG, vide letter No. **FP-20013/2/2017-FP-PNG-Part(1) (E-36682) dated 11.07.2023** has specified the Minimum Local Content (MLC) for getting purchase preference and Margin of Purchase Preference (PP) for high value oil & gas LSTK/EPC contracts/projects. These guidelines shall be applicable for tenders under this procuring entity.

The above referred Letters/Order/OM are enclosed with this NIT for reference [*Annexure-XVIII-E*].

Other Terms & Conditions:-

a) **Price Validity:** L1 Bidder's quoted prices against various items of enquiry shall remain valid even in case of splitting of quantities of the items as described above.

b) **Negotiation:** In case purchase preference is applicable, but negotiation is to be conducted with L1 bidder, negotiation shall be carried out. MSE and/or Class-I local supplier shall be offered to match the negotiated prices (even if, post negotiation, they are higher by more than 20% (for Class-I local supplier)/ 15% (for MSEs) as compared to L1 bidder provided they were within 20% (for Class-I local supplier)/ 15% (for MSEs) of L1 bidder as per original quoted prices) and left out quantity, if any, as per provisions of enquiry document shall be awarded to that bidder.

c) **Certification of Local Content:**

The onus of submission of appropriately certified documents lies with the bidder and the purchaser shall not have any liability to verify the contents and will not be responsible for the same.

- The bidder shall submit an undertaking from the authorised signatory of bidder having the Power of Attorney along with the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall also become a part of the contract.

- In cases of procurement for a value in excess of Rs. 10 Crores, the Undertaking submitted by the bidder shall be supported by a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of other than companies) giving the percentage of local content.

- However, in case of foreign bidder, certificate from the statutory auditor or cost auditor of their own office or subsidiary in India giving the percentage of local content shall be acceptable. In case office or subsidiary in India does not exist or Indian office/ subsidiary do not have statutory auditor or cost auditor, certificate from practicing cost accountant or practicing chartered accountant giving the percentage of local content is also acceptable.

However, in case the procuring company has any reason to doubt the authenticity of the Local Content, it reserves the right to obtain the complete back up calculations before award of work failing which the bid shall be rejected.

(i) At bidding stage:

Bidder shall furnish the undertaking/ declaration in the enclosed **Format-2A** and break-up of local content calculation as per **Format – 2AA** in the un-priced part of the bid duly signed, sealed & stamped. [To be submitted for all tenders]

Additional format for providing the certification from the statutory auditor / cost auditor / practicing cost accountant / practicing chartered accountant, is enclosed as **Format-2B**. [**To be mandatorily submitted for contracts above Rs. 10 Crores**]

Also, format for Declaration of Minimum Local Content (Item wise, applicable for Multiple Item Splitable Tender) is enclosed as **Format-2C**. [To be submitted for all Multiple Item Splitable Tender]

(ii) <u>After award of contract</u>**:**

- The Local Content Certificate shall be submitted along with each invoice raised. However, the % of local content may vary with each invoice while maintaining the overall % of local content for the total work / purchase of the pro-rata local content requirement. In case, it is not satisfied cumulatively in the invoices raised up to that stage, the supplier shall indicate how the local content requirement would be met in the subsequent stages.

- At the time of execution of project, for all contracts above Rs. 10 Crores, the contractor/supplier shall be required to give local content certification duly certified by Cost/Chartered Accountant in practice. For cases where it is not possible to provide certification by Cost/Chartered Accountant along with running bills or milestone bills when the project is still under execution, the contractor/supplier shall be permitted to provide such certificate for local content certified by a practicing Cost/Chartered Accountant at the time of submission of final bill or within time limit acceptable to NRL/procuring entity.

- As regards cases where currency quoted by the bidder is other than Indian Rupee, exchange rate, as per RBI reference rate prevailing on the on the date of notice inviting tender (NIT) shall be considered for the calculation of Local Content.

- Procuring company shall also have the authority to audit as well as witness production processes to certify the achievement of the requisite local content.

d) **<u>Failure of bidder in complying with the local content post award:</u>**

During execution, it shall be the responsibility of the supplier/contractor to ensure fulfilment of the minimum local content specified in the bidding document.

In case the contractor/supplier does not meet the stipulated local content requirement and the category of the contractor/supplier changes from Class-I to Class-II/Non-local or form Class-II to Non-local, the following actions shall be taken by the procuring company:

a. Imposition of a pre-determined financial penalty @ 10% of total contract value.
b. Banning business with the supplier/contractor for a period of two year for breach of the code of integrity.

****

FORMAT– 2A

(DECLARATION TO BE SUBMITTED ALONG WITH UNPRICED BID)

Declaration/ Undertaking for availing purchase preference under PP-LC Policy

Sr. no.	Parameter	Declaration	Remarks
1	We confirm that our offer is in compliance to Policy to provide purchase preference (linked with local content) as per the provision of enquiry.	Yes / No *(Please √, as applicable)*	
2	Please clarify whether the bidder is a Class-I Local Supplier OR a Class-II Local Supplier or Non-Local Supplier.	Class-I : __ Class –II : __ Non-Local : __ *(Please √, as applicable)*	
3	Bidder confirms that the bidder meets the minimum Local content requirement as specified for Class-I or Class–II local supplier specified for claiming Purchase Preference under policy to purchase preference (linked with local content).	Yes/ No *(Please √, as applicable)*	
4	**Mention the percentage of local content in the bid. [** *Incase of Multiple Item Splitable Tender, bidder must indicate % of Min. LC item-wise as per format 2C enclosed with the tender.*]	_____% *(Please fill)*	Bidder to ensure that bidder's % local content mentioned in Sr. 4, is in accordance with status mentioned as Class-I Local Supplier OR as Class-II Local Supplier (as applicable) in sr. no. 2 above. Bidder to provide break-up of local content calculation as per **Format – 2AA** provided below.
5	We confirm that we have submitted the requisite documents, as per the PP-LC policy enclosed in the bidding document, to establish our status as Class-I or Class–II local supplier, as applicable.	Yes/ No *(Please √, as applicable)*	Failing to submit these documents will be liable for rejection/ non-consideration for purchase preference, as per the provisions defined in PP-LC policy enclosed in bidding document.
6.	In case order is placed on us, we hereby declare to submit Local Content Certificate along with each Invoice raised in line with the Min Local Content declared by us in our offer against the tender.	Yes/ No *(Please √, as applicable)*	
7	Whether bidder is an MSE bidder?	Yes/ No *(Please √, as applicable)*	If yes- Necessary documents to be attached along with unpriced part of the bid.

Signature of bidder's authorized signatory:_____
(With Seal/ Stamp/Date)

Note: This undertaking shall be certified by the authorized signatory of the bidder having the Power of Attorney.

FORMAT– 2AA

Format for calculation of Local Content in Goods/Services/Works/EPC Contracts:

All figures should only be in terms of percentage (%) of total quoted price. Actual prices must not be mentioned here.

		Domestic	Imported			Total	Local content in %
Particulars			Imported Items (Including all custom duties)	Locally Sourced Imported Items from resellers or distributors (Inclusive of taxes)	License, royalties, technical expertise etc. sourced from outside India		
		A	B	B1	B2	C = A+B+B1+B2	D = (A ÷ C) x 100%
A	Cost component I. Material used / Direct Material cost (in % only)				x		
	II. Personnel, consultant, labour cost (in % only)						
	III. Other services, production, overhead cost (in % only)						
	IV. Total cost (I to III) (in % only)						
B	Taxes and Duties (in % only)	Excluding net domestic indirect taxes					
C	Total quoted price (in % only)					100%	

Exchange rate as per RBI reference rate prevailing on the on the date of notice inviting tender (NIT) shall be considered for the calculation of Local Content in INR.

Signature of bidder's authorized signatory:_____
(With Seal/ Stamp/Date)

Note: This undertaking shall be certified by the authorized signatory of the bidder having the Power of Attorney.

FORMAT– 2B

[To be submitted for contracts above Rs. 10 Crores]

(DECLARATION – CERTIFIED, TO BE UPLOADED ALONG WITH UNPRICED BID)

Certification towards local content (as per the provision of pp-lc policy)

To,
M/s Numaligarh Refinery Limited

We, _____, the Statutory Auditor / Cost Auditor / Cost Accountant / Chartered Accountant (not being an employee / Director of the company) of M/s _____ (name of the bidder) having our registered office address _____ hereby certify the following:

a) We have reviewed the local content in the offer no. _____ dated _____ submitted by M/s _____ (name of the bidder) against the enquiry no. _____ as per the requirement defined in policy to purchase preference (linked with local content).

b) In the above offer, we certify the bidder's status and local content as under:
   - Class-I local Supplier: Offer has local content equal to or more than 50%, as defined in the policy.
     OR
   - Class-II local Supplier: Offer has local content more than 20% but less than 50%, as defined in the policy.

{Strike off whichever is not applicable out of two above)

Name of Statutory Auditor / Cost Auditor / Cost Accountant / Chartered Accountant:

[Signature of Authorized signatory] Name :

Designation Seal :

Membership no. : UDIN No:

Note:

1) This undertaking shall be certified by statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies).
2) The above format is indicative, the Statutory Auditor / Cost Auditor / Cost Accountant / Chartered Accountant can modify the format without changing the intent of certification.

FORMAT-2C

Declaration of Minimum Local Content (item wise)
(Applicable for Multiple Item Splitable Tender)

BOQ Sl. No.	**Item Short Text**	**Bidder's Declaration of Minimum Local Content (item-wise)** (To be filled from options provided in last column)	**Available Options**
10	Item 1		***Class-I Local Supplier (Min LC ≥ 50%)*** ***or*** ***Class-II Local Supplier (20%≤Min LC <50%)*** ***or*** ***Non-Local Supplier (Min LC<20%)*** ***or*** ***Item Not Quoted***
20	Item 2		
30	Item 3		
40	Item 4		
..	……		
..	……		

Signature of bidder's authorized signatory:

(With Seal/ Stamp)

Date:

Note: This undertaking shall be certified by the authorized signatory of the bidder having the Power of Attorney.

File No: FP-20013/2/2017-FP-PNG-Part (4) (E-41432)
Government of India
Ministry of Petroleum and Natural Gas
(Flagship Programme Cell)
****

Shastri Bhawan, New Delhi
Dated 26th April, 2022

To,

1. Chairman, IOCL
2. C&MD, BPCL/ HPCL/ ONGC/ OIL/ GAIL/ EIL/ Balmer Lawrie
3. Managing Director, MRPL/NRL/CPCL// BCPL/ OVL
4. DG, DGH
5. DG, PPAC
6. Secretary, OIDB
7. ED, PCRA
8. ED, OISD
9. ED, CHT
10. Director, RGIPT
11. Secretary, PNGRB
12. CEO & MD, ISPRL

Sub: Public Procurement (Preference to Make in India) (PPP-MII) Order, 2017-reg.

Sir/Madam,

I am directed to refer to this Ministry's letter of even number dated 23.02.2022 regarding Policy to Provide Purchase Preference (linked with local content) (PP-LC) in all Public Sector Undertakings under the Ministry of Petroleum and Natural Gas (MoP&NG) and to say that Public Procurement (Preference to Make in India) Order, 2017 issued by DPIIT and as amended time to time shall be applicable to all the Public Sector Undertakings and their wholly owned subsidiaries under MoP&NG; Joint Ventures that have 51% or more equity by one or more Public Sector Undertakings under MoP&NG; attached and subordinate offices of MoPNG w.e.f. 01.04.2022.

2. Moreover, as per para 14 of the PPP-MII Order, the following modifications in the order shall be applicable on the procuring entities under this Ministry:

a. Limit for exemption of small purchase under para 4 of the PPP-MII Order, 2017 shall be Rs. 1 crore.

b. Local value addition through services such as transportation, insurance, installation, commissioning, training and after sales services support like AMC/ CMC etc. shall continue to be considered in local content calculation.

c. HP-HT operations in upstream oil and gas business activities shall be exempted from applicability of the Order.

3. This issues with the approval of Hon'ble Minister, Petroleum and Natural Gas.

Yours faithfully

26/04/2022

(Santanu Dhar)
Under Secretary to the Govt. of India
Tel.: 011-23388652

Copy to:

a. PS to Minister, PNG
b. PPS/ PS to Secretary/ AS&FA/ Sr. Economic Advisor, MoPNG
c. PPS/ PS to AS (E)/ JS(R)/ JS (M& GP)/ OSD (IC)/ JS (G)/ JS (IFD)/ DDG (ED), MoPNG
d. PPS/PS to Dir.(BR)/Dir.(E-II)/Dir.(E-I)/DS(GP)/DS(Mkt.)/DS(LPG)/DS(Admn.)/DS(RTI)/ DS (Gen) MoPNG

Copy for information to:

Secretary, DPIIT

No. P-45021/2/2017-PP (BE-II)-Part(4)Vol.II
Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
(Public Procurement Section)

Vanijya Bhawan, New Delhi
Dated: 19 July,2024

To

All Central Ministries/Departments/CPSUs/All concerned

ORDER

Subject: Public Procurement (Preference to Make in India), Order 2017– Revision; regarding.

Department for Promotion of Industry and Internal Trade, in partial modification [Paras 2, 3, 5, 10 & 13] of Order No.P-45021/2/2017-B.E.-II dated 15.6.2017 as amended by Order No.P-45021/2/2017-B.E.-II dated 28.05.2018, Order No.P-45021/2/2017-B.E.-II dated 29.05.2019, Order No.P-45021/2/2017-B.E.-II dated 04.06.2020 and Order No.P-45021/2/2017-B.E.-II dated 16.09.2020 hereby issues the revised 'Public Procurement (Preference to Make in India), Order 2017" dated 19.07.2024 effective with immediate effect.

Whereas it is the policy of the Government of India to encourage 'Make in India' and promote manufacturing and production of goods and services in India with a view to enhancing income and employment, and

Whereas procurement by the Government is substantial in amount and can contribute towards this policy objective, and

Whereas local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them,

Now therefore the following Order is issued:

1. This Order is issued pursuant to Rule 153 (iii) of the General Financial Rules 2017.
2. **Definitions**: For the purposes of this Order:
   'Local content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

Explanatory notes for calculation of local content given above

a. Imported items sourced locally from resellers/distributors shall be excluded from calculation of local content.
b. The license fees/royalties paid/ technical charges paid out of India shall be excluded from local content calculation.

c. Procurement/Supply of repackaged/refurbished/rebranded imported products as understood commonly shall be treated as reselling of imported products and shall be excluded from calculation of local content. The definition of repackaged/refurbished/rebranded imported products is as follows;

'Refurbishing' means repair or reconditioning of an imported product does not amount to manufacture because no new goods come into existence.

'Repackaging' means repacking of imported goods from bulk pack to smaller packs would not ordinarily amount to manufacture of a new item.

'Rebranding' means relabeling or renaming or change in symbol or logo/makes or corporate image of a company/organization/ firm for an imported product would amount to rebranding.

d. To ensure that imported items sourced locally from resellers/distributors are excluded from calculation of local content, procuring entities to obtain from bidders, the cost of such locally-sourced imported items (Inclusive of taxes) along with break-up on license/royalties paid/technical expertise cost etc. sourced from outside India. For items sold by bidder as reseller, OEM certificate for country of origin to be submitted.

e. For contracts involving supply of multiple items, weighted average of all items to be taken while calculating the local content.

'*Class-I local supplier*' means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-I local supplier' under this Order.

'*Class-II local supplier*' means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-II local supplier' but less than that prescribed for 'Class-I local supplier' under this Order.

'*Non - Local supplier*' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than that prescribed for 'Class-II local supplier' under this Order.

'*L1*' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

'*Margin of purchase preference*' means the maximum extent to which the price quoted by a "Class-I local supplier" may be above the L1 for the purpose of purchase preference.

'*Nodal Ministry*' means the Ministry or Department identified pursuant to this order in respect of a particular item of goods or services or works.

'*Procuring entity*' means a Ministry or department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

'Works' means all works as per Rule 130 of GFR- 2017, and will also include *'turnkey works'*.

2A. *Special treatment for items covered under PLI Scheme*

The manufacturers manufacturing an item under PLI scheme shall be treated as deemed Class II local supplier for that item unless they have minimum local content equal to or higher than that notified for Class-I local supplier for that item, provided the manufacturer has received incentive from the concerned PLI Ministry for the item. The above shall be applicable for the specific time period only, as notified by concerned PLI Ministry.

3. Eligibility of 'Class-I local supplier'/ 'Class-II local supplier'/ 'Non-local suppliers' for different types of procurement

(a) In procurement of all goods, services or works in respect of which the Nodal Ministry / Department has communicated that there is sufficient local capacity and local competition, only 'Class-I local supplier', as defined under the Order, shall be eligible to bid irrespective of purchase value.

(b) Only 'Class-I local supplier' and 'Class-II local supplier', as defined under the Order, shall be eligible to bid in procurement undertaken by procuring entities, except when Global tender enquiry has been issued. In global tender enquiries, 'Non-local suppliers' shall also be eligible to bid along with 'Class-I local suppliers' and 'Class-II local suppliers'. In procurement of all goods, services or works, not covered by sub-para 3(a) above, and with estimated value of purchases less than Rs. 200 Crore, in accordance with Rule 161(iv) of GFR, 2017, Global tender enquiry shall not be issued except with the approval of competent authority as designated by Department of Expenditure.

(c) For the purpose of this Order, works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

3.1 Mandatory sourcing of items, with sufficient local capacity and competition, from Class-I local suppliers in SI/EPC/Turnkey Contracts/Service Tenders

a. The items, notified as having sufficient local capacity and competition, shall mandatory be sourced from Class-I local suppliers in SI/EPC/Turnkey Contracts/ Services tenders. This provision will be applicable only for those items which have been notified by the Nodal Ministry as Class I i.e. having sufficient local capacity and competition, with specific HSN codes."

b. Notwithstanding above, if in any project, it is considered that it is not practically feasible to source such items from Class I local suppliers, it may take relaxation from such stipulation with the approval of Secretary of the administrative Ministry/ Department concerned or with the approval of the Competent Authority specified by the Administrative Ministry/Department, on case-specific basis.

3A. Purchase Preference

(a) Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to 'Class-I local supplier' in procurement undertaken by procuring entities in the manner specified here under.

(b) In the procurement of goods or works, which are covered by para 3(b)

above and which are divisible in nature, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1.
ii. If L1 bid is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.

(c) In the procurement of goods or works, which are covered by para 3(b) above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is Class -I local supplier', the contract will be awarded to L1.
ii. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.
iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

(d) "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.

3B. Applicability in tenders where contract is to be awarded to multiple bidders- In tenders where contract is awarded to multiple bidders subject to matching of L1 rates or otherwise, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

a. In case there is sufficient local capacity and competition for the item to be procured, as notified by the nodal Ministry, only Class I local suppliers shall be eligible to bid. As such, the multiple suppliers, who would be awarded the contract, should be all and only 'Class I Local suppliers'.
b. In other cases, 'Class II local suppliers' and 'Non local suppliers' may also participate in the bidding process along with 'Class I Local suppliers' as per provisions of this Order.
c. If 'Class I Local suppliers' qualify for award of contract for at least

50% of the tendered quantity in any tender, the contract may be awarded to all the qualified bidders as per award criteria stipulated in the bid documents. However, in case 'Class I Local suppliers' do not qualify for award of contract for at least 50% of the tendered quantity, purchase preference should be given to the 'Class I local supplier' over 'Class II local suppliers'/ 'Non local suppliers' provided that their quoted rate falls within 20% margin of purchase preference of the highest quoted bidder considered for award of contract so as to ensure that the 'Class I Local suppliers' taken in totality are considered for award of contract for at least 50% of the tendered quantity.

d. First purchase preference has to be given to the lowest quoting 'Class-I local supplier', whose quoted rates fall within 20% margin of purchase preference, subject to its meeting the prescribed criteria for award of contract as also the constraint of maximum quantity that can be sourced from any single supplier. If the lowest quoting 'Class-I local supplier', does not qualify for purchase preference because of aforesaid constraints or does not accept the offered quantity, an opportunity may be given to next higher 'Class-I local supplier', falling within 20% margin of purchase preference, and so on.

e. To avoid any ambiguity during bid evaluation process, the procuring entities may stipulate its own tender specific criteria for award of contract amongst different bidders including the procedure for purchase preference to 'Class-I local supplier' within the broad policy guidelines stipulated in sub- paras above.

4. **Exemption of small purchases**: Notwithstanding anything contained in paragraph 3, procurement where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Order.

4A. Exemption in sourcing of spares and consumables of closed systems:

Procurement of spare parts, consumables for closed systems and Maintenance/ Service contracts with Original Equipment Manufacturer/Original Equipment Supplier/Original Part Manufacturer shall be exempted from this Order.

5. **Minimum local content**: The 'local content' requirement to categorize a supplier as 'Class-I local supplier' is minimum 50%. For 'Class-II local supplier', the 'local content' requirement is minimum 20%. Nodal Ministry/ Department may prescribe only a higher percentage of minimum local content requirement to categorize a supplier as 'Class-I local supplier'/ 'Class- II local supplier'. For the items, for which Nodal Ministry/ Department has not prescribed higher minimum local content notification under the Order, it shall be 50% and 20% for 'Class-I local supplier'/ 'Class-II local supplier' respectively.

6. **Margin of Purchase Preference**: The margin of purchase preference shall be 20%.

7. **Requirement for specification in advance**: The minimum local content, the margin of purchase preference and the procedure for preference to Make in India shall be specified in the notice inviting tenders or other form of procurement solicitation and shall not be varied during a particular procurement transaction.

8. **Government E-marketplace**: In respect of procurement through the Government E-marketplace (GeM) shall, as far as possible, specifically mark the items which meet the minimum local content while registering the item for

display, and shall, wherever feasible, make provision for automated comparison with purchase preference and without purchase preference and for obtaining consent of the local supplier in those cases where purchase preference is to be exercised.

9. **Verification of local content**:

a. The 'Class-I local supplier'/ 'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/ 'Class-II local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made.

b. In cases of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier'/ 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

c. The bidder shall give self-certification for local content in the quoted item (goods/works/services) at the time of tendering. However, at the time of execution of the project, for all contracts above INR 10 Crore, the contractor/ supplier shall be required to give local content certification duly certified by cost/ chartered accountant in practice. For cases where it is not possible to provide certification by Cost/Chartered Accountant at the time of execution of project, the supplier shall be permitted to provide the certificate for local content from Cost/ Chartered Accountant after completion of the contract, within time limit acceptable to the procuring entity. In case the contractor/ supplier does not meet the stipulated local content requirement and the category of the supplier changes from Class-I to Class-II/ Non-local or from Class-II to Non-local, a penalty upto 10% of the contract value may be imposed. However, contract once awarded shall not be terminated on this account.

d. Decisions on complaints relating to implementation of this Order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.

e. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-declarations and auditor's/ accountant's certificates on random basis and in the case of complaints.

f. Nodal Ministries and procuring entities may prescribe fees for such complaints.

g. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

h. A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed under paragraph 9

i below.

l. The Department of Expenditure shall issue suitable instructions for the effective and smooth operation of this process, so that:
   i. The fact and duration of debarment for violation of this Order by any procuring entity are promptly brought to the notice of the Member-Convenor of the Standing Committee and the Department of Expenditure through the concerned Ministry /Department or in some other manner;
   ii. On a periodical basis such cases are consolidated and a centralized list or decentralized lists of such suppliers with the period of debarment is maintained and displayed on website(s);
   iii. In respect of procuring entities other than the one which has carried out the debarment, the debarment takes effect prospectively from the date of uploading on the website(s) in the such a manner that ongoing procurement are not disrupted.

10. **Specifications in Tenders and other procurement solicitations:**
   a. Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports.
   b. Procuring entities shall endeavour to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of 'Class-I local supplier'/ 'Class-II local supplier' who would otherwise be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier.
   c. Procuring entities shall, within 2 months of the issue of this Order review all existing eligibility norms and conditions with reference to sub-paragraphs 'a' and 'b' above.
   d. **Reciprocity Clause**
      i. When a Nodal Ministry/Department identifies that Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, due to restrictive tender conditions which have direct or indirect effect of barring Indian companies such as registration in the procuring country, execution of projects of specific value in the procuring country etc., it shall provide such details to all its procuring entities including CMDs/CEOs of PSEs/PSUs, State Governments and other procurement agencies under their administrative control and GeM for appropriate reciprocal action.
      ii. Entities of countries which have been identified by the nodal Ministry/Department as not allowing Indian companies to participate in their Government procurement for any item related to that nodal Ministry shall not be allowed to participate in Government procurement in India for all items related to that nodal Ministry/ Department, except for the list of items published by the Ministry/ Department permitting their participation.
      iii. The stipulation in (ii) above shall be part of all tenders invited by the Central Government procuring entities stated in (i) above. All purchases on GeM shall also necessarily have the above provisions for items identified by nodal Ministry/ Department.
      iv. State Governments should be encouraged to incorporate similar provisions in their respective tenders.
      v. The term 'entity' of a country shall have the same meaning as under the FDI Policy of DPIIT as amended from time to time.
   e. Specifying foreign certifications/ unreasonable technical specifications/

brands/ models in the bid document is restrictive and discriminatory practice against local suppliers. If foreign certification is required to be stipulated because of non-availability of Indian Standards and/or for any other reason, the same shall be done only after written approval of Secretary of the Department concerned or any other Authority having been designated such power by the Secretary of the Department concerned.

f. "All administrative Ministries/Departments *whose procurement exceeds Rs. 1000 Crore per annum* shall notify/update their procurement projections every year, including those of the PSEs/PSUs, for the next 5 years on their respective website."

10A. Action for non-compliance of the Provisions of the Order: In case restrictive or discriminatory conditions against domestic suppliers are included in bid documents, an inquiry shall be conducted by the Administrative Department undertaking the procurement (including procurement by any entity under its administrative control) to fix responsibility for the same. Thereafter, appropriate action, administrative or otherwise, shall be taken against erring officials of procurement entities under relevant provisions. Intimation on all such actions shall be sent to the Standing Committee.

11. **Assessment of supply base by Nodal Ministries**: The Nodal Ministry shall keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing the higher minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.

12. **Increase in minimum local content**: The Nodal Ministry may annually review the local content requirements with a view to increasing them, subject to availability of sufficient local competition with adequate quality.

13. **Manufacture under license/ technology collaboration agreements with phased indigenization**: While notifying the minimum local content, Nodal Ministries may make special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there is a technology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content.

13A. In procurement of all goods, services or works in respect of which there is substantial quantity of public procurement and for which the nodal ministry has not notified that there is sufficient local capacity and local competition, the concerned nodal ministry shall notify an upper threshold value of procurement beyond which foreign companies shall enter into a joint venture with an Indian company to participate in the tender. Procuring entities, while procuring such items beyond the notified threshold value, shall prescribe in their respective tenders that foreign companies may enter into a joint venture with an Indian company to participate in the tender. The procuring Ministries/Departments shall also make special provisions for exempting such joint ventures from meeting the stipulated minimum local content requirement, which shall be increased in a phased manner.

14. **Powers to grant exemption and to reduce minimum local content**: The administrative Department undertaking the procurement (including

procurement by any entity under its administrative control), with the approval of their Minister-in-charge, may by written order, for reasons to be recorded in writing,

a. reduce the minimum local content below the prescribed level; or
b. reduce the margin of purchase preference below 20%; or
c. exempt any particular item or supplying entities from the operation of this Order or any part of the Order.

The Administrative Department, while seeking exemption under this para, shall certify that such an item(s) has not been notified by Nodal Ministry/ Department concerned under para 3 (a) of the Order.

A copy of every such order shall be provided to the Standing Committee and concerned Nodal Ministry / Department. The Nodal Ministry / Department concerned will continue to have the power to vary its notification on Minimum Local Content.

15. **Directions to Government companies**: In respect of Government companies and other procuring entities not governed by the General Financial Rules, the administrative Ministry or Department shall issue policy directions requiring compliance with this Order.
16. **Standing Committee**: A standing committee is hereby constituted with the following membership:
Secretary, Department for Promotion of Industry and Internal Trade - Chairman
Secretary, Commerce—Member
Secretary, Ministry of Electronics and Information Technology—Member Joint Secretary (Public Procurement), Department of Expenditure—Member Joint Secretary (DPIIT)—Member-Convenor

The Secretary of the Department concerned with a particular item shall be a member in respect of issues relating to such item. The Chairman of the Committee may co-opt technical experts as relevant to any issue or class of issues under its consideration.

17. **Functions of the Standing Committee:** The Standting Committee shall meet as often as necessary, but not less than once in six months. The Committee

a. shall oversee the implementation of this order and issues arising therefrom, and make recommendations to Nodal Ministries and procuring entities.
b. shall annually assess and periodically monitor compliance with this Order
c. shall identify Nodal Ministries and the allocation of items among them for issue of notifications on minimum local content
d. may require furnishing of details or returns regarding compliance with this Order and related matters
e. may, during the annual review or otherwise, assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practices, cartelization or increase in public expenditure and suggest remedial measures
f. may examine cases covered by paragraph 13 above relating to manufacture under license/ technology transfer agreements with a view to satisfying itself that adequate mechanisms exist for enforcement of such agreements and for attaining the underlying objective of progressive indigenization

g. may consider any other issue relating to this Order which may arise.

18. **Removal of difficulties**: Ministries /Departments and the Boards of Directors of Government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this Order.

19. **Ministries having existing policies**: Where any Ministry or Department has its own policy for preference to local content approved by the Cabinet after 1st January 2015, such policies will prevail over the provisions of this Order. All other existing orders on preference to local content shall be reviewed by the Nodal Ministries and revised as needed to conform to this Order, within two months of the issue of this Order.

20. **Transitional provision**: This Order shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this Order.

19/2/24

(Himani Pande)
Additional Secretary to the Government of India
Tel: 011-23038888
E-mail: ashp.dpiit@gov.in

No.F.1/4/2021-PPD
Government of India
Ministry of Finance
Department of Expenditure
Public Procurement Division
*****

264-C, North Block, New Delhi.
18.05.2023.

OFFICE MEMORANDUM

Subject: Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

The undersigned is directed to refer two Preferential Procurement Orders mandated for the Public Procurement in India, namely:

i. Public Procurement Policy for Micro and Small Enterprises (MSEs) Order dated 23.03.2012 (PPP-MSE Order) issued by Ministry of Micro, Small and Medium Enterprises (MoMSME) in exercise of the powers conferred in Section 11 of the MSME Development Act, 2006. (Last revised on 09.11.2018)

ii. Public Procurement (Preference to Make in India) Order, 2017 (PPP-MII order), under Rule 153(iii) of the General Financial Rules (GFRs) 2017, approved by the Cabinet. Implementation of this PPP-MII order is monitored by Department for Promotion of Industry and Internal Trade (DPIIT). (Last revised on 16.09.2020.)

2. It has been brought to the notice of this Department that concurrent application of these two orders are creating confusion to the procuring entities and different procuring entities interpret them differently. In order to bring predictability both to the procuring entities as well as bidders, following guidelines are being issued.

Guidelines

3. The Class-I local suppliers, under PPP-MII Order, participating in any government tender, may or may not be MSEs, as defined under the MSME Act. Similarly, MSEs participating in any government tender, may or may not be Class-I local suppliers. Suppliers may be categorised in following four broad categories for consideration or applicability of purchase preference:

Category	Terminology
Supplier is both MSE & Class-I local supplier.	"MSE Class-I local supplier".
Supplier is MSE but not Class-I local supplier.	"MSE but non-Class-I local supplier"
Supplier is not MSE but is Class-I local supplier.	"Non-MSE but Class-I local supplier"
Supplier is neither MSE nor Class-I local.	"Non-MSE non-Class-I local supplier"

4. The applicability of PPP-MSE Order and PPP-MII Order in various scenarios, involving simultaneous purchase preference to MSEs and Class-I local suppliers under PPP-MSE Order and PPP-MII Order respectively, shall be as under:

a) *Items covered under Para 3(a) of PPP- MII Order, 2017 for which Nodal Ministry has notified sufficient local capacity and competition:* For these items, only Class-I local suppliers are eligible to bid irrespective of purchase value. Hence, Class-II local suppliers or Non-local suppliers, including MSEs which are Class-II local suppliers/ Non-local suppliers, are not eligible to bid. Possible scenarios can be as under:

(i) L-1 is "MSE Class-I local supplier" - 100% of the tendered quantity is to be awarded to L-1.

(ii) L-1 is "Non-MSE but Class-I local supplier" - Purchase preference is given to MSEs as per PPP-MSE Order. Balance quantity is to be awarded to the L-1 bidder.

b) *Items reserved exclusively for procurement from MSEs as per PPP-MSE Order:* These items are reserved exclusively for purchase from MSEs. Hence, non-MSEs are not eligible to bid for these items. Possible scenarios can be as under:

(i) L-1 is "MSE Class-I local supplier" - 100% of the tendered quantity is to be awarded to L-1.

(ii) L-1 is "MSE non-Class–I local supplier" - Purchase preference is to be given to Class-I local supplier as per PPP-MII Order. Balance quantity, is to be awarded to L-1 bidder.

c) *If items are neither notified for sufficient local capacity nor reserved for MSEs, then the process will be as follows:*

c (a) Items covered under Para 3A(b) of PPP-MII Order are divisible items and both MSEs as well as Class-I local suppliers are eligible for purchase preference. Possible scenarios can be as under:

(i) L-1 is "MSE Class-I local supplier" - 100% of the tendered quantity is to be awarded to L-1.

(ii) L-1 is "Non-MSE but Class-I local supplier" - Purchase preference is to be given to MSEs, if eligible, as per PPP-MSE Order. Balance quantity is to be awarded to L-1 bidder.

(iii) L-1 is "MSE but non-Class-I local supplier" - Purchase preference is to be given to Class-I local suppliers, if eligible, as per PPP-MII Order. Balance quantity is to be awarded to L-1 bidder.

(iv) L-1 is "Non-MSE non-Class-I local supplier" - Purchase preference is to be given to MSEs as per PPP-MSE Order. Thereafter, purchase preference is to be given to Class-I local suppliers for "50% of the tendered quantity minus quantity allotted to MSEs

above" as per PPP- MII Order. For the balance quantity, contract is to be awarded to L-1 bidder. *(Kindly refer to the illustrative example in the annexure).*

c (b) Items covered under Para 3A(c) of PPP-MII Order, 2017 are non-divisible items and both MSEs as well as Class-I local suppliers are eligible for purchase preference. Possible scenarios can be as under:

(i) L-1 is "MSE Class-I local supplier" - Contract is awarded to L-1.

(ii) L-1 is not "MSE Class-I local supplier" but the "MSE Class-I local supplier" falls within 15% margin of purchase preference - Purchase preference is to be given to lowest quoting "MSE Class-I local supplier". If lowest quoting "MSE Class-I local supplier" does not accept the L-1 rates, the next higher "MSE Class-I local supplier" falling within 15% margin of purchase preference is to be given purchase preference and so on.

(iii) If conditions mentioned in sub paras (i) and (ii) above are not met i.e. L-1 is neither "MSE Class-I local supplier" nor "MSE Class-I local supplier" is eligible to take benefit of purchase preference, the contract is to be awarded/ purchase preference to be given in different possible scenarios as under:

A. L1 is "MSE but non-Class-I local supplier" or "Non-MSE but Class-I local supplier" – Contract is be awarded to L1.

B. L1 is "Non-MSE non-Class-I local supplier" - First purchase preference to be given to MSE as per PPP-MSE Order. If MSE not eligible/ does not accept - purchase preference to be given to Class- I Local supplier as per PPP-MII Order. If Class-I Local supplier also not eligible/ does not accept – contract to be awarded to L-1.

d) *Items reserved for both MSEs and Class-I local suppliers*: These items are reserved exclusively for purchase from MSEs as well as Class-I local suppliers. Hence, only "MSE Class-I local supplier" are eligible to bid for these items. Non-MSEs/Class-II local suppliers/ Non-local suppliers cannot bid for these items. Hence the question of purchase preference does not arise.

e) Non-local suppliers, including MSEs falling in the category of Non-local suppliers, shall be eligible to bid only against Global Tender Enquiry.

18/5/2023

(Kanwalpreet)
Director
Tel.:-223093811; email: - kanwal.irss@gov.in

To

1. Secretaries of all Central Government Ministries/ Departments.
2. Secretary Department of Public Enterprises with a request for issuing suitable instructions to all Central Public Sector Enterprises in this regard.

Annexure

Example explaining applicability in scenario explained in para 4 c (a)(iv)

(Scenario: Divisible items, both MSEs as well as Class-I local suppliers eligible for purchase preference and L-1 is "Non-MSE non-Class-I local supplier")

Item – Desktop computer

Qty – 50 Nos.

Details of bids received

Sr. No.	Name of bidder	Rates quoted	Price Ranking	Status of bidder
1.	A	100	L1	"Non-MSE non- Class-I local supplier"
2.	B	110	L2	"Non-MSE but Class-I local supplier"
3.	C	112	L3	"MSE but non- Class-I local supplier"
4.	D	115	L4	"Non-MSE but Class-I local supplier"
5.	E	118	L5	"MSE but non- Class-I local supplier"
6.	F	120	L6	"MSE Class-I local supplier"

1. In this case, first purchase preference is to be given to MSEs as per PPP-MSE Order for 25% of tendered quantity of 50 Nos. i.e. 12.5 Nos. (rounded off to the next whole number say 13 Nos). Accordingly, invite L3 (bidder C), whose quoted rates falls within 15% margin of purchase preference to match L1 price i.e. Rs. 100/- for quantity of 13 Nos. Bidder "E" and "F", although MSEs, will not get purchase preference since their quoted rates don't fall within 15% margin of purchase preference. Bidder C will be considered for order of 13 Nos. on confirmation of reduction of price.

2. For 50% of balance quantity of 37 number (tendered quantity of 50 – 13 awarded to bidder C; assuming bidder C has confirmed to accept L1 rates), purchase preference will be given to lowest Class-I local supplier as per PPP-MII Order. Accordingly, bidder B will be invited to match L-1 price for 50% of 37 Nos i.e. 18.5 (say 19 Nos of computers). If bidder "B" does not accept the L1 price i.e. price of Rs. 100/- per unit, next higher Class-I local supplier falling within 20% margin of purchase preference, i.e. bidder "D", may be invited to match L-1 price for 19 Nos. of computers and so on.

3. For remaining quantity i.e. 18 Nos (50-13-19), the contract will be awarded to lowest quoting bidder i.e. Bidder "A", who is L-1 in the example.

***

File No.:FP-20013/2/2017-FP-PNG-Part(1) (E-36682)
Government of India
Ministry of Petroleum and Natural Gas
(Flagship Programme Cell)
****

Shastri Bhawan, New Delhi
Date 11th July, 2023

To,

1. Chairman, IOCL
2. CMD, ONGC/ OIL/ BPCL/GAIL/ HPCL/ EIL/ Balmer Lawrie
3. Managing Director, MRPL/ NRL/ CPCL/ BCPL/ OVL
4. DG, DGH
5. DG, PPAC
6. Secretary, OIDB
7. ED, OISD
8. ED, CHT
9. Director, RGIPT/ IIPE
10. Secretary, PNGRB
11. CEO & MD, ISPRL

Subject: Public Procurement (Preference to Make in India) Order, 2017: notifying revised Minimum Local Content (MLC) for getting purchase preference and Margin of Purchase Preference (PP) for high value oil and gas LSTK/ EPC contacts/projects- reg.

Reference: MoPNG letter no. FP-20013/2/2017-FP-PNG-Part (4) (E-41432) dated 26.04.2022.

Sir/ Madam,

I am directed to refer to this Ministry's above mentioned letter and to say that in order to increase competition and to incentivize progressive increase in Minimum Local Content in high value oil and gas LSTK/EPC contracts/projects, it has been decided under para 14 of the Public Procurement (Preference to Make in India) Order, 2017, to revise Minimum Local Content (MLC) for getting purchase preference and Margin of Purchase Preference (PP) for such contacts/projects on progressive basis with predictable trajectory.

2. The Minimum Local Content (MLC) for getting purchase preference and Margin of Purchase Preference (PP) for high value oil and gas LSTK/ EPC contracts/projects shall be as under:

Estimated cost		**2023-24**	**2024-26**	**2026 onwards**
Between USD 25 Million to USD 50 Millions	MLC	50%	50%	50%
	PP	10%		
Between USD 50 Millions to USD 100 Millions	MLC	30%	50%	50%
	PP	10%		

11/07/23

Estimated cost		2023-24	2024-26	2026 onwards
Between USD 100 Millions to USD 150 Millions	MLC	30%	35%	50%
	PP	10%		
More than USD 150 Millions	MLC	30%	30%	35%
	PP	10%		

3. This issues with the approval of Hon'ble Minister, P&NG.

Yours faithfully

(Kapil Kumar)
Under Secretary to the Govt. of India
Tel.:011-23383074

Copy to,

a. PS to Hon'ble Minister, P&NG
b. PS to Hon'ble MoS, P&NG
c. PPS/PS to Secretary, P&NG
d. PPS/PS to AS&FA/ AS, MoPNG
e. PPS/PS to JS(E&BR)/ JS (M&OR)/ JS (IC)/ JS (G)/ JS (IFD)/ DDG, MoPNG
f. Technical Director, NIC: with request to upload the letter on MoPNG website

Copy for information to,

Secretary, DPIIT

APPENDIX-IV TO ITB

DOMESTICALLY (INDIAN) MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT (DMI&SP)

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

सी.जी.-डी.एल.-अ.-26052025-263378
CG-DL-E-26052025-263378

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित
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इस्पात मंत्रालय

अधिसूचना

नई दिल्ली, 26 मई, 2025

सा.का.नि. 341(अ).— घरेलू स्तर पर विनिर्मित पूर्ववर्ती लौह एवं इस्पात उत्पाद नीति के अधिक्रमण में, सरकारी अधिप्राप्ति में घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पादों को वरीयता प्रदान करने के लिए संशोधित घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पाद नीति-2025 को आम सूचना के लिए एतदद्वारा प्रकाशित किया जाता है।

सरकारी अधिप्राप्ति में घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पादों को वरीयता देने के लिए नीति - संशोधित, 2025

1. पृष्ठभूमि

1.1 यह नीति सरकारी अधिप्राप्ति में घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पादों (डीएमआईएंडएसपी) को वरीयता देती है।

1.2 यह नीति परिशिष्ट क में अधिसूचित लौह एवं इस्पात उत्पादों की खरीद पर लागू होती है। परिशिष्ट ख में, लौह एवं इस्पात उत्पादों के विनिर्माण के लिए न्यूनतम घरेलू सामग्री और पूंजीगत वस्तुओं

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की छूट प्राप्त सूची सूचीबद्ध की गई है, जिन्हें आयात किया जा सकता है। परिशिष्ट ग में स्वदेशी प्रौद्योगिकी आपूर्तिकर्ताओं से प्रौद्योगिकी की खरीद को बढ़ावा देने की नीति शामिल है।

2. परिभाषाएं

2.1 **बोलीदाता** लौह एवं इस्पात का कोई घरेलू/विदेशी विनिर्माता अथवा उनके बिक्री एजेंट/अधिकृत वितरक/अधिकृत डीलर/अधिकृत आपूर्ति गृह अथवा सरकारी एजेंसियों द्वारा वित्त पोषित परियोजनाओं में बोली लगाने में कार्यरत कोई अन्य कंपनी हो सकती है।

2.2 **घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पाद (डीएमआईएंडएसपी)** वे लौह एवं इस्पात उत्पाद हैं जिनका विनिर्माण उन प्रतिष्ठानों द्वारा किया जाता है जो भारत में पंजीकृत और स्थापित हैं, जिसमें विशेष आर्थिक क्षेत्र (एसईजैड) शामिल हैं।

2.3 **घरेलू विनिर्माता** खंड 7 में दिशा निर्देशों और केंद्रीय उत्पाद शुल्क अधिनियम के अनुसार 'विनिर्माता' की परिभाषा के अनुरूप लौह एवं इस्पात उत्पादों का एक विनिर्माता है।

2.4 **घरेलू मूल्य संवर्धन** का अर्थ है - भारत में जोड़े गए मूल्य की राशि जो अधिप्राप्त की जाने वाली वस्तु के कुल मूल्य (शुद्ध घरेलू अप्रत्यक्ष करों को छोड़कर) में से अधिप्राप्त की जाने वाली वस्तु के कुल मूल्य के अनुपात के रूप में वस्तु में आयातित सामग्री के मूल्य (सभी सीमा शुल्कों सहित) को घटाकर प्रतिशत में प्राप्त होगी। 'घरेलू मूल्य संवर्धन' की परिभाषा डीपीआईआईटी दिशा-निर्देशों के अनुरूप होगी और भविष्य में डीपीआईआईटी द्वारा किसी भी बदलाव के मामले में इसे उपयुक्त रूप से संशोधित किया जाएगा। इस नीति दस्तावेज के उद्देश्य के लिए, घरेलू मूल्य संवर्धन और स्थानीय सामग्री का परस्पर उपयोग किया गया है।

% घरेलू मूल्य संवर्धन =

{अधिप्राप्त की जाने वाली वस्तु का कुल मूल्य (शुद्ध घरेलू अप्रत्यक्ष करों को छोड़कर) - वस्तु में आयातित सामग्री का मूल्य (सभी सीमा शुल्कों सहित)}

---------- X 100%

{अधिप्राप्त की जाने वाली वस्तु का कुल मूल्य}

2.5 **तैयार इस्पात** (फिनिश्ड स्टील) का तात्पर्य सपाट और लंबे उत्पादों से होगा, जिन्हें बाद में प्रसाधित कर विनिर्मित वस्तु बनाया जा सकता है।

2.6 इस नीति के प्रयोजन से **सरकार** का तात्पर्य भारत सरकार से है।

2.7 **सरकारी एजेंसियों** में सरकार के सार्वजनिक क्षेत्र के उपक्रम, भारत सरकार द्वारा स्थापित सोसायटी, ट्रस्ट और सांविधिक निकाय शामिल हैं।

2.8 **स्वदेशी प्रौद्योगिकी:** किसी प्रौद्योगिकी को स्वदेशी प्रौद्योगिकी माना जाएगा यदि, इकाई की कम से कम 51% इक्विटी भारतीय निवासियों के पास हो और आईपीआर का स्वामित्व या सह-स्वामित्व

किसी भारतीय इकाई के पास हो या विशेष रूप से उन्हें लाइसेंस प्राप्त हो तथा मुख्य इंजीनियरिंग अनुसंधान एवं विकास और परियोजना निष्पादन क्षमताएं भारत में हों।

2.9 **एल1** का तात्पर्य निविदा अथवा अन्य अधिप्राप्ति अनुरोध के अनुसार मूल्यांकन प्रक्रिया में यथाघोषित निविदा, बोली लगाने संबंधी प्रक्रिया अथवा अन्य अधिप्राप्ति अनुरोधों में प्राप्त न्यूनतम निविदा अथवा न्यूनतम बोली अथवा न्यूनतम भाव से होगा।

2.10 **एमओएस** का आशय इस्पात मंत्रालय, भारत सरकार से है।

2.11 **खरीद वरीयता के मार्जिन** का तात्पर्य उस अधिकतम सीमा से है जिस सीमा तक किसी घरेलू आपूर्तिकर्ता द्वारा लगाई गई कीमत खरीद वरीयता के प्रयोजन से एल1 से अधिक हो। डीएमआईएंडएसपी नीति के मामले में, खरीद वरीयता का मार्जिन परिशिष्ट ख में मदों के लिए 20% होगा।

2.12 **मेल्ट एंड पोर** को एक ऐसे इस्पात के रूप में परिभाषित किया गया है जिसे इस्पात बनाने वाले फर्नेस में उत्पादित किया जाता है और इसे अपने पहले ठोस आकार में डाला जाता है। जिस स्थान पर यह प्रक्रिया होती है उसे मेल्ट एंड पोर का उद्गम स्थल (सीओएम) कहा जाता है। सीओएम वह मूल स्थान है जहाँ क्रूड इस्पात को पहली बार तरल अवस्था में उत्पादित किया जाता है और इसे अपने पहले ठोस आकार में डाला जाता है। पहला ठोस आकार एक अर्ध-तैयार उत्पाद जैसे स्लैब, बिलेट, पिंड या एक तैयार इस्पात मिल उत्पाद हो सकता है।

2.13 **निवल बिक्री मूल्य** इन्वॉइस मूल्य होगा जिसमें निवल घरेलू कर और शुल्क शामिल नहीं होंगे।

2.14 **अर्ध-तैयार इस्पात** (सेमी-फिनिश्ड स्टील) का तात्पर्य इनगोट्स, बिलेट्स, ब्लूम्स और स्लेब्स से है, जिसे बाद में प्रसाधित कर तैयार इस्पात बनाया जा सकता है। पल

3. अपवर्जन

3.1 इस्पात मंत्रालय द्वारा इस प्रकार की सभी सरकारी अधिप्राप्ति के लिये निम्नलिखित शर्तों के अध्यधीन छूट प्रदान की जा सकती है।

3.1.1 जहां विशिष्ट ग्रेडों के इस्पात का निर्माण इस देश में नहीं किया जाता हो, अथवा

3.1.2 जहां परियोजना की मांग के अनुसार इन मात्राओं को घरेलू स्रोतों के माध्यम से पूरा नहीं किया जा सकता हो।

3.2 छूट संबंधी अनुरोध लौह एवं इस्पात उत्पादों की घरेलू स्तर पर अनुपलब्धता के पर्याप्त प्रमाण के साथ स्थायी समिति के समक्ष प्रस्तुत किए जाएंगे।

4. स्थायी समिति

4.1 सचिव (इस्पात) की अध्यक्षता में एक स्थायी समिति नीति के कार्यान्वयन को देखेगी।

4.2. इस समिति में उद्योग/उद्योग संघ/सरकारी संस्था अथवा निकाय/इस्पात मंत्रालय (एमओएस) से लिए गए विशेषज्ञ शामिल होंगे। इस्पात मंत्रालय में उक्त समिति के पास निम्नलिखित के लिए अधिदेश होगा:

4.2.1 नीति के कार्यान्वयन की निगरानी करना।

4.2.2 परिशिष्ट क, परिशिष्ट ख और परिशिष्ट ग में उल्लिखित लौह एवं इस्पात उत्पादों की सूची, घरेलू सामग्री आवश्यकता मानदंड और नीति निर्देशों की समीक्षा करना और उन्हें अधिसूचित करना।

4.2.3 पैरा 3 के अनुसार प्रापण एजेंसियों को अपवर्जन की स्वीकृति देने सहित इस नीति के कार्यान्वयन के लिए आवश्यक स्पष्टीकरण जारी करना।

4.2.4 इस नीति के कार्यान्वयन से संबंधित शिकायतों की प्रारंभिक जांच के लिए एक शिकायत निवारण समिति का गठन करना।

4.2.5 अधिप्राप्ति एजेंसी द्वारा इस नीति का अनुपालन न किए जाने की स्थिति में संबंधित मंत्रालयों/विभागों को उचित कार्रवाई के लिए निर्देश जारी करना और सलाह देना।

4.3 जहां भी प्रापण इकाई इस निष्कर्ष पर पहुंचती है कि उपलब्ध बोलीदाता/विनिर्माता द्वारा अनुचित रूप से उच्च मूल्य निर्धारित किया गया है, तो मामले को स्थायी समिति को भेजा जा सकता है। ऐसे मामलों में, प्रापण इकाई को अपने मामले को पूर्ण और विस्तृत दस्तावेज़ों के साथ प्रमाणित करना होगा।

4.4 बोली दस्तावेज़ में विदेशी प्रमाणन/अनुचित तकनीकी विनिर्देश निर्दिष्ट करना स्थानीय आपूर्तिकर्ताओं के विरुद्ध प्रतिबंधात्मक और भेदभावपूर्ण व्यवहार है। यदि भारतीय मानकों की अनुपलब्धता और/या किसी अन्य कारण से विदेशी प्रमाणन निर्धारित करना आवश्यक है, तो ऐसा समिति की लिखित स्वीकृति के बाद ही किया जाएगा।

5. प्रयोज्यता

5.1 यह नीति सरकार के प्रत्येक मंत्रालय अथवा विभाग और उनके प्रशासनिक नियंत्रणाधीन सभी एजेंसियों/इकाइयों तथा सरकारी परियोजनाओं के लिए लौह एवं इस्पात उत्पादों की खरीद हेतु इन एजेंसियों द्वारा वित्त पोषित परियोजनाओं पर लागू है। केन्द्रीय क्षेत्र की सभी योजनाएं (सीएस)/ केन्द्रीय प्रायोजित योजनाएं (सीएसएस) जिनके लिए राज्यों और स्थानीय निकायों द्वारा खरीद की जाती है, इस नीति की परिधि में आएंगी, यदि उस परियोजना/योजना को भारत सरकार द्वारा पूर्णतया/अंशत: वित्तपोषित किया जाता है।

5.2 यह नीति सार्वजनिक क्षेत्रों के इस्पात विनिर्माताओं और उनके प्रशासनिक नियंत्रणाधीन एजेंसियों/इकाइयों पर लौह एवं इस्पात उत्पादों के विनिर्माण के लिए पूंजीगत मालों (परिशिष्ट-ख) की अधिप्राप्ति के लिए लागू है।

5.3 परिशिष्ट-ख में लौह एंव इस्पात उत्पादों के निर्माण में उपयोग किए जाने वाले पूंजीगत माल की छूट संबंधी सूची दर्शाई गई है, जिन्हें आयात किया जा सकता है, तथा संबंधित पैकेजों के लिए न्यूनतम घरेलू मूल्य संवर्धन आवश्यकता बताई गई है। पूंजीगत माल के लिए घरेलू मूल्य संवर्धन, जैसा कि

दर्शाया गया है, परिवर्तन के अधीन है; उदाहरण के लिए, यदि देश में कुछ पूंजीगत माल घटकों का विनिर्माण किया जाता है, तो घरेलू मूल्य संवर्धन प्रतिशत बढ़ सकता है।

5.4 इस्पात विनिर्माण में उपयोग किए जाने वाले पूंजीगत माल के लिए 20% की खरीद वरीयता लागू है। उदाहरण के लिए, यदि आयात योग्य पूंजीगत माल के लिए न्यूनतम बोलीदाता (एल1) कोई विदेशी कंपनी है, जिसने उत्पाद पैकेज के लिए 100 करोड़ रुपये की कीमत बताई है, तो नीति के तहत, समान पूंजीगत माल के घरेलू आपूर्तिकर्ता के लिए 20% की खरीद वरीयता लागू होगी।

5.5 परिशिष्ट-ग में इस्पात बनाने वाले सीपीएसई के लिए स्वदेशी प्रौद्योगिकी आपूर्तिकर्ताओं से खरीद करने के निर्देश और कार्यप्रणाली दी गई है।

5.6 यह नीति उन परियोजनाओं और गैर-परियोजनाओं पर लागू होगी, जहाँ किसी संविदा में लौह एवं इस्पात उत्पादों (परिशिष्ट-क) का कुल अधिप्राप्ति मूल्य मदवार आधार पर 5 लाख रुपये से अधिक है।

5.7 लौह एवं इस्पात उत्पादों की अधिप्राप्ति से संबंधित निविदाओं के लिए कोई वैश्विक निविदा इन्क्वायरी (जीटीई) आमंत्रित नहीं की जाएगी (डीएमआईएंडएसपी नीति का परिशिष्ट-क)। लौह एवं इस्पात उत्पादों के विनिर्माण जिनका अनुमानित मूल्य 200 करोड़ रु. तक हो, (डीएमआईएंडएसपी नीति के परिशिष्ट-ख) के लिए पूंजीगत माल की अधिप्राप्ति से संबंधित निविदाओं के लिए कोई वैश्विक निविदा इन्क्वायरी (जीटीई) व्यय विभाग द्वारा यथा नाम-निर्दिष्ट सक्षम प्राधिकारी के अनुमोदन के अलावा आमंत्रित नहीं की जाएगी।

5.8 यह नीति सरकार के मंत्रालय अथवा विभाग अथवा उनके सार्वजनिक क्षेत्र के उपक्रमों की किसी ईपीसी संविदा और/ अथवा अन्य आवश्यकता को पूरा करने के लिए को पूरा करने के लिए निजी एजेंसियों द्वारा लौह एवं इस्पातों की अधिप्राप्ति पर लागू है।

6. अधिप्राप्ति के लिए निविदा प्रक्रिया

6.1 प्रापण एजेंसियां डीएमआईएंडएसपी नीति का पालन करते समय वित्त मंत्रालय और सीवीसी के अनुदेशों के अनुसार मानक अधिप्राप्ति संबंधी प्रक्रियाओं का पालन करेगी।

6.2 माल की अधिप्राप्ति के साथ-साथ ईपीसी संविदाओं के लिए निविदा दस्तावेज में परिशिष्ट क और परिशिष्ट ख में उल्लिखित आवश्यकताओं के अनुपालन के लिए योग्यता मानदंड को स्पष्ट रूप से रेखांकित किया जाना चाहिए।

6.3 परिशिष्ट-क और परिशिष्ट-ख के तहत आने वाले उत्पादों के घरेलू विनिर्माताओं को बोली लगाते समय नीति में निर्धारित फॉर्म-1 के अनुसार स्थानीय सामग्री का स्व-प्रमाणन करना होगा।

6.4 वे बोलीदाता जो परिशिष्ट-क के अंतर्गत आने वाले लौह एवं इस्पात उत्पादों के घरेलू विनिर्माताओं के विक्रय एजेंट/अधिकृत वितरक/अधिकृत डीलर/अधिकृत आपूर्ति घर हैं, वे नीति के अंतर्गत घरेलू विनिर्माताओं की ओर से स्व-प्रमाणन के साथ बोली लगाने के लिए पात्र हैं, बशर्ते कि बोलीदाता डिलीवरी के समय घरेलू विनिर्माता द्वारा जारी किया गया प्राधिकरण प्रमाणपत्र प्रस्तुत करें।

6.5 डीएमआईएंडएसपी नीति के परिशिष्ट ख के अंतर्गत आने वाले उत्पादों के लिए बोलीदाता को कंपनी के सांविधिक लेखापरीक्षक या लागत लेखापरीक्षक (कंपनियों के मामले में) या किसी व्यवसायिक लागत लेखाकार या व्यवसायिक चार्टर्ड अकाउंटेंट (कंपनियों के अलावा आपूर्तिकर्ताओं के संबंध में) द्वारा जारी प्रमाणीकरण प्रस्तुत करना होगा, जिसमें यह घोषित किया जाएगा कि लौह एवं इस्पात उद्योग में उपयोग किए जाने वाले पूंजीगत माल निर्धारित घरेलू मूल्य संवर्धन के अनुसार घरेलू स्तर पर विनिर्मित किए गए हैं।

6.6 यदि किसी वस्तु के भारतीय आपूर्तिकर्ताओं को किसी विदेशी सरकार द्वारा अधिप्राप्ति में भाग लेने और/या प्रतिस्पर्धा करने की अनुमति नहीं है, क्योंकि निविदा की कुछ प्रतिबंधात्मक शर्तें हैं, जिनका प्रत्यक्ष या अप्रत्यक्ष रूप से भारतीय कंपनियों पर प्रतिबंध है, जैसे अधिप्राप्ति करने वाले देश में पंजीकरण, अधिप्राप्ति करने वाले देश में विशिष्ट मूल्य की परियोजनाओं का निष्पादन आदि, तो वे उचित पारस्परिक प्रापण संस्थाओं को ऐसे विवरण उपलब्ध कराएंगे।

6.7 इस्पात मंत्रालय द्वारा उन देशों की संस्थाओं की पहचान की गई है जो भारतीय कंपनियों को इस्पात मंत्रालय से संबंधित किसी भी वस्तु के लिए अपनी सरकारी अधिप्राप्ति में भाग लेने की अनुमति नहीं देते हैं, उन्हें इस्पात मंत्रालय से संबंधित सभी वस्तुओं के लिए भारत में सरकारी अधिप्राप्ति में भाग लेने की अनुमति नहीं दी जाएगी, सिवाय इस्पात मंत्रालय द्वारा प्रकाशित उन वस्तुओं की सूची के जो उन्हें भाग लेने की अनुमति देती हैं।

6.8 उपरोक्त अनुबंध जैम पोर्टल सहित केन्द्र सरकार की प्रापण संस्थाओं द्वारा आमंत्रित सभी निविदाओं का हिस्सा होगी।

6.9 यदि बोली दस्तावेजों में घरेलू आपूर्तिकर्ताओं के खिलाफ प्रतिबंधात्मक या भेदभावपूर्ण शर्तें शामिल की जाती हैं, तो अधिप्राप्ति करने वाले प्रशासनिक विभाग (इसके प्रशासनिक नियंत्रण के तहत किसी भी इकाई द्वारा अधिप्राप्ति सहित) द्वारा इसकी जिम्मेदारी तय करने के लिए जांच की जाएगी। इसके बाद, संबंधित प्रावधानों के तहत प्रापण संस्थाओं के दोषी अधिकारियों के खिलाफ प्रशासनिक या अन्यथा उचित कार्रवाई की जाएगी। ऐसी सभी कार्रवाई की सूचना डीएमआईएंडएसपी नीति के तहत स्थायी समिति को भेजी जाएगी।

6.10 इस आदेश के उल्लंघन के लिए किसी प्रापण इकाई द्वारा प्रतिबंधित आपूर्तिकर्ता प्रतिबंध की अवधि के दौरान किसी अन्य अधिप्राप्ति करने वाली इकाई द्वारा अधिप्राप्ति के लिए इस आदेश के तहत वरीयता के लिए पात्र नहीं होगा। ऐसी अन्य प्रापण संस्थाओं के लिए प्रतिबंध उस तारीख से प्रभावी होगा जिस दिन यह अन्य अधिप्राप्ति करने वाली संस्थाओं के ध्यान में आता है।

6.11 यदि, इस मामले को इस्पात मंत्रालय के पास भेजा जाता है, तब इस्पात मंत्रालय के अधीन गठित शिकायत निवारण समिति सरकारी एजेंसी के दृष्टिकोण पर विचार करने के बाद बोलीदाता से सभी दस्तावेजों के प्राप्त होने और उसका संदर्भ भेजे जाने के 4 सप्ताह के भीतर शिकायत का निपटारा

करेगी। बोलीदाता से यह अपेक्षित होगा कि वे इस मामले के संदर्भ के 2 सप्ताह के भीतर इस्पात मंत्रालय के अंतर्गत शिकायत निवारण समिति को लौह एवं इस्पात उत्पादों में दावा किए गए घरेलू मूल्यवर्धन के समर्थन में आवश्यक दस्तावेज प्रस्तुत करे।

6.12 निविदा दस्तावेज में निर्धारित घरेलू मूल्यवर्धन का बोलीदाता के द्वारा गलत घोषणा किए जाने की स्थिति में प्रापण ऐजेंसी शास्ती को स्पष्ट रूप से परिभाषित करेगी। इस शास्ती में ऐसे विनिर्माता/सेवा प्रदाता आदि की ईएमडी को जब्त करना, अन्य वित्तीय शास्ती लगाना और उसे ब्लेकलिस्ट किया जाना शामिल हो सकता है।

7. इस्पात मंत्रालय द्वारा कार्यान्वयन की निगरानी

7.1 इस नीति के प्रावधान प्रकाशन की तिथि से 5 वर्षों की अवधि के लिए लागू रहेंगे और इस नीति की अवधि को इस्पात मंत्रालय के विवेक से और आगे बढ़ाया जा सकता है।

7.2 इस्पात मंत्रालय इस नीति के कार्यान्वयन की निगरानी करने के लिए नोडल मंत्रालय होगा।

7.3 डीएमआईएंडएसपी नीति के अंतर्गत सभी एजेंसियां तिमाही आधार पर घोषणा पत्र भेजेगी जिसमें पिछले वित्तीय वर्ष के दौरान इस नीति के अनुपालन की सीमा और उसके अनुपालन न किए जाने के कारणों को दर्शाया जायेगा।

अनुलग्नक-क

लौह एवं इस्पात उत्पादों की सूची जिनकी अधिप्राप्ति केवल घरेलू स्रोतों से की जा सकती है

क्र.सं.	लौह एवं इस्पात उत्पाद	एचएस कोड	स्थिति
1	600 मि.मी. अथवा उससे अधिक की चौड़ाई वाले लौह अथवा गैर-मिश्रधातु इस्पात के फ्लैट रोल्ड उत्पाद, हॉट रोल्ड, नॉट क्लेड, प्लेट लगाया हुआ अथवा कोट किया हुआ	7208	मेल्ट एंड पोर
2	600 मि.मी. अथवा उससे अधिक की चौड़ाई वाले लौह अथवा गैर-मिश्रधातु इस्पात के फ्लैट रोल उत्पाद, कोल्ड रोल्ड (रिड्यूज्ड किया हुआ), नॉट क्लेड, प्लेट लगाया हुआ अथवा कोट किया हुआ	7209	मेल्ट एंड पोर
3	600 मि.मी. अथवा उससे अधिक की चौड़ाई वाले लौह अथवा गैर-मिश्रधातु इस्पात का फ्लैट रोल उत्पाद, क्लेड, प्लेट लगाया हुआ अथवा कोट किया हुआ	7210	मेल्ट एंड पोर
4	600 मि.मी. से कम की चौड़ाई वाले लौह अथवा गैर-मिश्रधातु इस्पात का फ्लैट रोल उत्पाद, नॉट क्लेड, प्लेट लगाया हुआ अथवा कोट किया हुआ	7211	मेल्ट एंड पोर

5	600 मि.मी. कम की चौड़ाई का लौह अथवा गैर-मिश्रधातु इस्पात का फ्लैट रोल उत्पाद, क्लेड, प्लेट लगाया हुआ अथवा कोट किया हुआ	7212	मेल्ट एंड पोर
6	लौह एवं गैर-मिश्रधातु इस्पात का अनियमित रूप से वूंड क्वाइल में बार्स और रॉड, हॉट रोल्ड	7213	मेल्ट एंड पोर
7	लौह अथवा गैर-मिश्रधातु इस्पात के अन्य बार्स और रॉड्स जिसे फोर्ज किए जाने की तुलना में आगे अधिक वर्क नहीं किया हुआ, हॉट रोल्ड, हॉट ड्रॉन अथवा हॉट एक्सटूडेड परंतु रोलिंग के बाद उसे टिविस्ट किये जाने सहित	7214	मेल्ट एंड पोर
8	लौह अथवा गैर-मिश्रधातु इस्पात का अन्य बार्स एंड रॉड्स	7215	मेल्ट एंड पोर
9	लौह अथवा गैर-मिश्रधातु इस्पात का एंगल, शेप और सेक्शन्स	7216	मेल्ट एंड पोर
10	लौह अथवा गैर-मिश्रधातु इस्पात का वायर	7217	मेल्ट एंड पोर
11	600 मि.मी. अथवा उससे अधिक की चौड़ाई का स्टेनलैस इस्पात का फ्लेट रोल्ड इस्पात	7219	मेल्ट एंड पोर
12	600 मि.मी. से कम की चौड़ाई का स्टेनलैस इस्पात का फ्लैट रोल्ड इस्पात	7220	मेल्ट एंड पोर
13	स्टेनलैस स्टील के अन्य बार्स और रॉड्स; स्टेनलैस स्टील का एंगल शेप और सेक्शन्स	7222	मेल्ट एंड पोर
14	अन्य मिश्रधातु इस्पात के वायर	7229	मेल्ट एंड पोर
15	लौह अथवा इस्पात को रेल, रेलवे अथवा ट्रामवे ट्रेक निर्माण सामग्री	7302	मेल्ट एंड पोर
16	कास्ट लौह के ट्यूब, पाइप और हॉलो पाइप	7303	मेल्ट एंड पोर
17	लौह (कास्ट आयरन को छोड़कर) अथवा इस्पात के ट्यूब पाइप और हॉलो प्रोफाइल, सीमलैस	7304	मेल्ट एंड पोर
18	लौह अथवा इस्पात के सर्कुलर क्रॉस सेक्शन वाले अन्य ट्यूब और पाइप (उदाहरण के लिए, वेल्ड किया हुआ, रिवेट किया हुआ अथवा समान रूप से बंद किया हुआ), जिसकी बाहरी त्रिज्या 406.4 मि.मी. से अधिक हो	7305	मेल्ट एंड पोर
19	लौह अथवा इस्पात के अन्य ट्यूब, पाइप और हॉलो प्रोफाइल (उदाहरण के लिए ओपन सीन अथवा वेल्ड किया हुआ, रिवेट किया हुआ अथवा समान रूप से बंद किया गया हुआ)	7306	मेल्ट एंड पोर
20	लौह अथवा इस्पात के ट्यूब अथवा पाइप फिटिंग (उदाहरण के लिए, कनेक्टर/कप्लिंग, एल्बो स्लीव्स)	7307	मेल्ट एंड पोर
21	स्टेनलैस स्टील का अनियमित रूप से वूंड क्वाइल में बार्स और रॉड, हॉट रोल्ड	7221	मेल्ट एंड पोर
22	स्टेनलैस स्टील का वायर	7223	मेल्ट एंड पोर
23	इलेक्ट्रिकल स्टील सहित 600 मि.मी. अथवा उससे अधिक की चौड़ाई वाले अन्य मिश्र धातु इस्पात का फ्लैट-रोल्ड इस्पात	7225	मेल्ट एंड पोर

24	इलेक्ट्रिकल स्टील सहित 600 मि.मी. से कम की चौड़ाई वाले अन्य मिश्रधातु इस्पात का फ्लैट-रोल्ड इस्पात	7226	मेल्ट एंड पोर
25	अन्य मिश्रधातु इस्पात का अनियमित रूप से वूंड क्वाइल में बार्स और रोड, हॉट रोल्ड	7227	मेल्ट एंड पोर
26	अन्य मिश्रधातु इस्पात का अन्य बार्स और रॉड्स; अन्य मिश्रधातु इस्पात का एंगल, शेप्स और सेक्शन्स; एलॉय अथवा गैर- मिश्रधातु इस्पात का हॉलो ड्रील बार्स और रॉड्स	7228	मेल्ट एंड पोर
27	लौह अथवा इस्पात की शीट पाइलिंग, चाहे ड्रील किया हुआ हो अथवा नहीं, चाहे पंच किया हुआ हो अथवा नहीं, चाहे असेम्बल किये हुए तत्वों से बना हुआ हो अथवा नहीं; लौह अथवा इस्पात का वेल्ड किया हुआ एंगल, शेप और सेक्शन्स	7301	मेल्ट एंड पोर
28	स्ट्रक्चर्स (9406 के शीर्ष का प्रीफेबरिकेटिड भवनों को छोड़कर) और स्ट्रक्चर्स का हिस्सा	7308	मेल्ट एंड पोर
29	300 से अधिक क्षमता का लौह अथवा इस्पात का किसी सामग्री (कम्प्रेस किए हुए अथवा तरलीकृत गैस को छोड़कर) के लिए भंडार, टैंक, वैट और समान कन्टेनर चाहे उसे लाइन किया गया हो अथवा नहीं या उसे हीट से इन्सुलेट किया गया हो अथवा नहीं लेकिन यांत्रिक अथवा तापीय उपक्रम से युक्त न हो	7309	मेल्ट एंड पोर
30	अधिकतक 300 लीटर की क्षमता का लौह अथवा इस्पात का किसी सामग्री (कम्प्रेस किए हुए अथवा तरलद्रवी गैस को छोड़कर) के लिए टैंक, कास्ट, ड्रम, केन, बॉक्स और समान कन्टेनर चाहे उसे लाइन किया गया हो अथवा नहीं या उसे हीट से इन्सुलेट किया गया हो अथवा नहीं लेकिन यांत्रिक अथवा तापीय उपक्रम से युक्त न हो	7310	मेल्ट एंड पोर
31	लौह अथवा इस्पात का कम्प्रेस किया हुआ अथवा तरलद्रवी गैस के लिए कन्टेनर	7311	मेल्ट एंड पोर
32	लौह अथवा इस्पात का स्टैंडिड वायर, रोप, केबल, प्लेटिड बैंड, स्लिंग और उसके समान वस्तु जिसे विद्युतीय रूप से इन्सुलेट न किया गया	7312	मेल्ट एंड पोर
33	लौह अथवा इस्पात का फेनसिंग के लिए उपयोग किये जाने वाला बार्ब्ड वायर; ट्विस्ट किया हुआ हूप अथवा सिंगल फ्लेट वायर, बार्स किया हुआ अथवा नहीं और लूज तरीके से ट्विस्ट किया हुआ डबल वायर	7313	मेल्ट एंड पोर
34	लौह अथवा इस्पात वायर का ड्रील, नेटिंग और फेनसिंग; लौह अथवा इस्पात संबंधित एक्सपैंडेड विस्तृत धातु	7314	मेल्ट एंड पोर
35	लौह अथवा इस्पात का चैन और उसका हिस्सा	7315	मेल्ट एंड पोर
36	लौह अथवा इस्पात का टैंकर, ग्रेपनेल्स और उसका हिस्सा	7316	मेल्ट एंड पोर

37	लौह एवं इस्पात की वस्तुएं	7317	मेल्ट एंड पोर
38	लौह एवं इस्पात की वस्तुएं	7318	मेल्ट एंड पोर
39	लौह एवं इस्पात की वस्तुएं	7319	मेल्ट एंड पोर
40	लौह अथवा इस्पात का स्प्रिंग और स्प्रिंग के लिए लीव्स	7320	मेल्ट एंड पोर
41	लौह अथवा इस्पात का स्टोव्स, रेंज, ग्रेड, कूकर (सेंट्रल हिटिंग के लिए सहायक बायलरों के साथ उन वस्तुओं सहित), बारबेक्यूज, ब्रेजियर्स, गैस रिंग, प्लेट वॉमर्स और समान गैर-विद्युतीय घरेलू उपकरण और उसका हिस्सा	7321	मेल्ट एंड पोर
42	लौह अथवा इस्पात का सेंट्रल हिटिंग के लिए रेडियेटर जिसे विद्युतीय रूप से हीट न किया गया हो और उसका हिस्सा; लौह अथवा इस्पात का हेयर हीटर और हॉट एयर वितरक जिसे विद्युतीय रूप से हीट न किया गया हो, फेन अथवा ब्लोअर जो मोटर से चलती हो और उसके हिस्से को शामिल करते हुए	7322	मेल्ट एंड पोर
43	लौह अथवा इस्पात का टेबल और समान घरेलू वस्तुएं और उसका हिस्सा	7323	मेल्ट एंड पोर
44	लौह अथवा इस्पात का सेनेटरी वेयर और उसके पार्टस	7324	मेल्ट एंड पोर
45	लौह अथवा इस्पात का अन्य कास्ट सामान	7325	मेल्ट एंड पोर
46	लौह अथवा इस्पात का विद्युतीय इस्पात और अन्य वस्तुएं	7326	मेल्ट एंड पोर
47	रेलवे अथवा ट्रामवे पेसेंजर कोच जो स्व-चालित नहीं है	8605	मेल्ट एंड पोर
48	रेलवे अथवा ट्रामवे माल वेन और वेगेन जो स्व-चालित नहीं है	8606	मेल्ट एंड पोर
49	रेलवे अथवा ट्रामवे लोकोमोटिव का हिस्सा अथवा रोलिंग स्टॉक जैसे बोगिज, बिसल बोगिज, एक्सेल और फोर्ज्ड किया हुआ पहिया और उसका हिस्सा	8607	मेल्ट एंड पोर

परिशिष्ट- ख

लौह एवं इस्पात उत्पादों तथा पैकेज के लिए लागू न्यूनतम घरेलू मूल्य संवर्धन के लिए आयात किए जा सकने वाले पूंजीगत माल (गैर-संपूर्ण) की सांकेतिक सूची

क्र.सं.	संयंत्र/यूनिट पैकेज	पूंजीगत माल के लिए न्यूनतम घरेलू मूल्य संवर्धन (%)	आयात योग्य वस्तुएँ
1	**कच्चे माल की हैंडलिंग प्रणाली** (बाउंड्री लिमिट - वैगन टिपलर से संबंधित उपयोगकर्ता इकाइयों तक)	95%	बैरल कप्लिंग, हेवी ड्यूटी बियेरिंग, क्रेन रेल लुब्रिकेशन प्रणाली, स्लू रिंग बियरिंग्स, टोंग्स (विशेष), बियेरिंग आइसोलेशन प्रणाली (स्प्रिंग डैम्पर)।
2	**मिनरल बेनिफिशिएशन (लिमिट लौह अयस्क और कोयला) उपस्कर** (बाउंड्री लिमिट: क्रेशर हॉपर में आरओएम की प्राप्ति, विखंडन, पृथक्करण, अयस्क/कोयला प्रसंस्करण से लेकर अंतिम उत्पाद तैयार करना)	75%	• वेट हाई इंटेन्सिटी मैग्नेटिक सैपरेटर / हाई ग्रेडीअन्ट मैग्नेटिक सैपेरेटर • हैवी मीडिया साइक्लोन • जाइरेटरी क्रशर • स्पाइलर कंसंट्रेटर • ऑनलाइन ऐश एनालाइजर
3	**खनन मशीनरी** (बाउंड्री लिमिट: ड्रिलिंग, रेजिंग, हॉलेज और खदान की तैयारी के लिए उपस्कर)	80%	डम्पर (220 टन से अधिक पे लोड क्षमता), हाइड्रोलिक एक्सकेवेटर (10.5 क्यूबिक मीटर बकेट क्षमता से अधिक)
4	**कोक ओवन बैटरी** (दोनों टॉप चार्ज और स्टैम्प चार्ज) (कोयला बंकर से कोक डिस्चार्ज बकेट तक)	90%	एंकरेज सिस्टम के स्प्रिंग्स, सीओजी बूस्टर, स्टैम्पिंग ट्रेन, बॉन्डिंग प्रेस
5	**कोक ड्राई क्वेन्चिंग संयंत्र**	90%	कूलिंग चैम्बर के ट्विन फ्लू के लिए मिल फैन और मोटर

	(हॉट कोक प्राप्त करने वाली बेकट से लेकर कूलिंग चैम्बर निर्वहन ढलान तक)		विशेष रिफैक्ट्री
6	**उपोत्पाद संयंत्र** (**प्राथमिक गैस कूलर से स्वच्छ कोक ओवन गैस** के **नेटवर्क तक**)	90%	एग्जॉस्टर और मोटर, क्लॉज किल्न कैटलिस्ट का बर्नर टेल गैस विश्लेषक, पैलेटाइजेशन इकाई
7	**सिंटर संयंत्र उपस्कर** (बाउंड्री लिमिट - उत्पाद सिंटर बिन के नीचे वाइब्रो-फीडर हेतु कच्चे माल के लिए प्राप्त बिन)	75%	हाई इन्टेन्सिव मिक्सर और ग्रैनुलेटर इकाई, पैलेट कार, ड्राइव स्प्रोकेट, सिंटर मशीन के गियर बॉक्स के साथ मुख्य ड्राइव, स्लाइड रेल और कर्व्ड रेल, हॉट सिंटर ब्रेकर और ग्रिज़ली, एनुलर डिप रेल कूलर, सिंटर प्लांट एग्जॉस्टर अनुप्रयोग के लिए एलसीआई ड्राइव सिस्टम
8	**पेलेट संयंत्र उपस्कर** (बाउंड्री लिमिट - फ्लक्स और बाइंडर के लिए ग्राउंड हॉपर प्राप्त करना, बेल्ट कन्वेयर उत्पाद पेलेट बेल्ट कन्वेयर को आईओएफ फीडिंग)	85%	पैलेट कार, हाई इंटेंसिव मिक्सर, बॉलिंग डिस्क, वर्टिकल रोलर मिल, ड्राइव/डिस्चार्ज एंड स्प्रोकेट असेंबली, कर्व्ड रेल, स्लाइड रेल, सिंगल डेक रोलर स्क्रीन और डबल डेक रोलर स्क्रीन, इंड्यूरेशन मशीन ड्राइव असेंबली, लेवल-2 ऑटोमेशन
9	**ब्लास्ट फर्नेस उपस्कर** **बाउंड्री लिमिट:** **इनपुट:** • **कच्चा माल - संबंधित सामग्री** के बंकरों का ऊपरी भाग	70%	• बेल लेस टॉप गियर बॉक्स, ऊपरी सील डिवाइस जो ऊपरी सामग्री गेट और ऊपरी सील वाल्व को कवर करती है, निचली सील डिवाइस जो निचले सामग्री गेट और

	• **कोल्ड ब्लास्ट** - स्नॉर्ट वाल्व का इनलेट • **औद्योगिक जल** - बीएफ पंप हाउस **आउटपुट** • **गरम धातु - टारपीडो** लेडल **में भरी जाती है** • **ग्रेनुलेटिड स्लैग -** ग्रेनुलेटिड स्लैग **यार्ड के लिए**		निचले सील वाल्व को कवर करती है, ब्लीडर वाल्व • हार्थ रिफ्रैक्टरी (कार्बन ब्लॉक) • टॉप रिकवरी टर्बाइन सिस्टम (टीआरटी) • क्यू-स्टेव्स • एसजीआई स्टेव्स • कास्ट हाउस उपस्कर (मड गन, ड्रिलिंग मशीन और मुख्य ट्रॉफ मैनिपुलेटर) • प्रोब, प्रोफाइलोमीटर और स्टॉक स्तर सूचक (रडार टाईप) • गैस सफाई संयंत्र (एजीएस प्रणाली) • स्टोव सिस्टम - सिरेमिक बर्नर और तकनीकी वाल्व • अपशिष्ट ऊष्मा पुनर्प्राप्ति प्रणाली • टर्बो ब्लोअर • बॉल मिल • पीसीआई इंजेक्शन सिस्टम • लेवल-II ऑटोमेशन
10	**गैस आधारित प्रत्यक्ष रीडक्शन संयंत्र उपस्कर** **(**बाउंड्री लिमिट: डीआरआई रिएक्टर के शीर्ष पर कच्चे माल की प्राप्ति और ईएएफ में हॉट डीआरआई का डिस्चार्ज**)**	50%	• रिएक्टर चार्जिंग सिस्टम • रिएक्टर • रिएक्टर डिस्चार्जिंग प्रणाली

			• ईएएफ में नुमैटिक ट्रांसफर • ब्रिकेटिंग प्रणाली के लिए डिस्चार्च रूट • ब्रिकेटिंग फीडिंग सिस्टम • ब्रिकेटिंग प्रणाली • रिडक्शन गैस सर्किट • CO_2 निष्कासन इकाई • प्रक्रिया गैस हीटर • सुधारक प्रणाली • हीट रिकवरी प्रणाली • प्रोसेस गैस कम्प्रेसर • ब्लोअर्स • सील गैस प्रणाली • फ्लू गैस फैन/हॉट फैन • प्रक्रिया वाल्व • क्रिटिकल बेलोज • क्रिटिकल रिफ्रैक्ट्री • प्राकृतिक गैस शोधन पूर्व प्रणाली • लेवल-II ऑटोमेशन
11	**ऑक्सीजन संयंत्र 700 टीपीडी और उससे अधिक** (सीमा: ऑक्सीजन संयंत्र सीमा पर पानी, विद्युत)	30%	• मुख्य एयर कंप्रेसर • बूस्टर एयर कंप्रेसर • एक्सपेशन टरबाइन • रिबॉयलर

			• क्रायोजेनिक पंप • एएसयू के हीट विनिमय तत्व
12	**इस्पात निर्माण**		
12.1	**हॉट मेटल डी-डी-सल्फराइजेशन स्टेशन (एचएमडीएस) यूनिट के साथ को-इंजेक्शन प्रक्रिया** (ब्लास्ट फर्नेस (बीएफ) से गर्म धातु को टारपीडो लेडल या ओपन-टॉप लेडल में प्राप्त किया जाता है, "सल्फर (एस)" सामग्री को कम करने के लिए डीसल्फराइजेशन शोधन से गुजारा जाता है, और फिर बीओएफ कनवर्टर में स्थानांतरित किया जाता है)	75%	• इंजेक्शन लांस और सहायक उपकरणों के साथ स्वचालित सैंपलिंग इकाई • सहायक उपकरणों के साथ डी-स्लैगिंग मशीनें (स्लैग रेकिंग मशीन) • सहायक उपकरणों के साथ तापमान मापने और नमूना लेने के साधन
12.2	**हॉट मेटल डी-डी-सल्फराइजेशन स्टेशन (एचएमडीएस) यूनिट मैकेनिकल स्टिरर (केआर) प्रक्रिया के साथ** (ब्लास्ट फर्नेस (बीएफ) से गर्म धातु को टारपीडो लेडल या ओपन-टॉप लेडल में प्राप्त किया जाता है, "सल्फर (एस)" सामग्री को कम करने के लिए डीसल्फराइजेशन शोधन से गुजारा जाता है, और फिर बीओएफ कनवर्टर में स्थानांतरित किया जाता है)	70%	• सहायक उपकरणों के साथ इम्पेलर, इम्पेलर लिफ्टिंग और स्टीरिंग उपस्कर, गाइड फ्रेम • सहायक सुविधाओं के साथ डी-स्लैगिंग मशीनें (स्लैग रेकिंग मशीन) • सहायक उपकरणों के साथ तापमान मापने और नमूना लेने का साधन
12.3	**बेसिक ऑक्सीजन फर्नेस/एलडी ईकाई** [शोधित गर्म धातु को बीओएफ कनवर्टर में डाला जाता है, जहां इसे इस्पात में परिवर्तित करने के लिए प्रसंस्कृत किया जाता है, जिसकी फिर लैडल फर्नेस (एलएफ) में आपूर्ति की जाती है]	65%	• क्लैम्पिंग के साथ लांस बॉडी, लांस कैरिज, लांस गाइड, लांस होइस्ट और ट्रॉली, सहायक उपकरणों के साथ लांस कॉपर टिप्स। • आपातकालीन टिल्टिंग ड्राइव के लिए न्यूमेटिक मोटर्स।

			• ज्वाइंट के साथ बॉटम स्टिरिंग प्रणाली, वाल्व स्टेशन और रोटरी • सहायक उपकरणों के साथ ऑक्सीजन/आर्गन/नाइट्रोजन के लिए वाल्व स्टेशन • सहायक उपकरणों के साथ उप-लांस प्रणाली • सभी सहायक उपकरणों सहित कंटेनर प्रयोगशाला। • सहायक उपकरणों के साथ स्वचालित गैस कपलिंग (ऑटो कपलर)। • कनवर्टर रेकिंग मशीन। • कनवर्टर टैप होल बदलने की मशीन • रिफ्रैक्टरी निगरानी (लेजर) मशीन।
12.4	**इलेक्ट्रिक आर्क फर्नेस यूनिट** (प्राथमिक सामग्री जैसे स्क्रैप, डी.आर.आई., पिग आयरन और गर्म धातु को विद्युत ऊर्जा का उपयोग करके तरल इस्पात में परिवर्तित किया जाता है, जिससे कच्चे माल को पिघलाया और परिष्कृत किया जाता है)	70%	• सहायक उपकरणों के साथ इलेक्ट्रोड रेगुलेशन प्रणाली • फर्नेस ट्रांसफार्मर सहित हाई करंट प्रणाली • सहायक उपकरणों के साथ ऑक्सीजन और कार्बन इंजेक्शन प्रणाली • सहायक उपकरणों के साथ मैनुअल तापमान मापन और नमूनाकरण लांस

12.5	**लैडल फर्नेस यूनिट** [तरल इस्पात को वांछित ग्रेड प्राप्त करने के लिए संसाधित/शोधित किया जाता है और निरंतर कास्टिंग मशीन (सीसीएम) को आपूर्ति किए जाने से पहले बफर स्टॉक के रूप में रखा जाता है]	70%	• सहायक उपकरणों के साथ इलेक्ट्रोड विनियमन प्रणाली • सहायक उपकरणों के साथ मैनुअल तापमान मापन और नमूनाकरण लांस
12.6	**आरएच/आरएच-ओबी यूनिट** [आवश्यक विघटित गैस स्तर प्राप्त करने के लिए तरल इस्पात को डीगैस किया जाता है और फिर निरंतर कास्टिंग मशीन (सीसीएम) को आपूर्ति की जाती है]	65%	• सहायक उपकरणों के साथ गैस स्टिरिंग सिस्टम/लिफ्ट गैस स्टिरिंग सिस्टम वॉल्व स्टैंड • सहायक उपकरणों के साथ ऑक्सीजन लांस प्रणाली • सहायक उपकरणों के साथ हाइड्रिस मापन प्रणाली
12.7	**सतत कास्टिंग इकाई** (स्लैब कास्टर/ बिलेट/ ब्लूम राउंड/ कॉम्बी/ बीम ब्लैंक) [तरल इस्पात को निरंतर कास्टिंग मशीन (सीसीएम) में स्लैब, बिलेट या ब्लूम में ढाला जाता है]	65%	• सहायक उपकरणों सहित लैडल स्लैग डिटेक्शन प्रणाली • कॉपर ट्यूब और प्लेट, मोल्ड ऑसीलेशन सिलेंडर। • रोटरी यूनियन। • सहायक उपकरणों सहित सतत तापमान माप प्रणाली। • सहायक उपकरणों के साथ टॉर्च कटिंग मशीन/ आपातकालीन टॉर्च कटर • सहायक उपकरणों सहित विद्युत ड्राइव सिस्टम सहित डिबुरर मशीन • मार्किंग मशीन।

			• सहायक उपकरणों सहित रोल गैप चेकर • सहायक उपकरणों के साथ इलेक्ट्रोमैग्नेटिक स्टिरर (ईएमएस)/इलेक्ट्रोमैग्नेटिक ब्रेकिंग (ईएमबीआर) प्रणाली
13	**फ्लैट उत्पाद मिल्स**		
13.1	**हॉट स्ट्रिप मिल्स/ प्लेट मिल** (बाउंड्री लिमिट: सहायक उपकरणों सहित) स्लैब यार्ड से डिस्पैच बे तक)	50%	• डी-स्केलर, मिल स्टैंड, बेड प्लेट, बैकअप रोल, वर्क रोल, मिल स्पिंडल, चॉक्स, एजीसी सिलेंडर, बेंडिंग ब्लॉक और सिलेंडर, शियर, डाउन कॉइलर, एंटी-फ्रिक्शन रोल नेक बेयरिंग, ऑयल फिल्म बेयरिंग, मिल रिड्यूसर, लोड सेल, थिकनेस गॉज, प्रोफाइल गॉज, लेवलर, रोल ग्राइंडिंग मशीन, कॉइल मार्किंग मशीन, प्लेट मार्किंग मशीन, मिल स्टैंड मोटर्स और मिल स्टैंड एमवी ड्राइव सिस्टम, ऑटोमेशन सिस्टम आदि।
13.2	**सीआरएम (पीएलटीसीएम)** (बाउंड्री लिमिट: पिकलिंग लाइन प्रवेश से मिल निकास तक)	50%	• वेल्डिंग मशीन, टेंशन लेवलर, मिल स्टैंड, बैकअप रोल, एंटीफ्रिक्शन बीयरिंग, ऑयल फिल्म बीयरिंग, रोल चॉक्स, रोल फोर्स सिलेंडर, रोल बेंडिंग और रोल शिफ्टिंग सिलेंडर, मिल स्पिंडल, लोड सेल, पोजिशन ट्रांसड्यूसर, इलेक्ट्रोस्टेटिक ऑइलर, साइड ट्रिमर, स्टीयरिंग सिस्टम, सरफेस इंस्पेक्शन सिस्टम, थिकनेस गेज, लेजर

			स्पीड गेज, टेंसियोमीटर, फ्लैटनेस गॉज, टेंशन रील, मिल रिड्यूसर, मिल स्टैंड मोटर्स और मिल स्टैंड एमवी ड्राइव सिस्टम, ऑटोमेशन सिस्टम आदि।
13.3	**सीआरएम (एचडीजीएल)** (बाउंड्री लिमिट: टेम्पर मिल और टेंशन लेवलर सहित एचडीजीएल में प्रवेश से निकास तक)	60%	• वेल्डिंग मशीन, रेडिएंट ट्यूब फर्नेस, जेट कूलिंग सिस्टम, इंडक्शन हीटिंग के साथ कोटिंग पॉट, पॉट रोल, एयर नाइफ वाइपिंग सिस्टम, टेंशन लेवलर, विड्थ गॉज, थिकनेस गेज, कोटिंग मोटाई गॉज, लोड सेल, रोल फोर्स सिलेंडर, मिल स्टैंड मोटर्स और मिल स्टैंड ड्राइव सिस्टम, ऑटोमेशन सिस्टम, आदि।
13.4	**सीआरएम (एसपीएम)** (बाउंड्री लिमिट: एसपीएम में प्रवेश से निकास तक)	50%	• मिल स्टैंड, बैकअप रोल, एंटीफ्रिक्शन बीयरिंग, ऑयल फिल्म बीयरिंग, रोल चॉक्स, रोल फोर्स सिलेंडर, मिल स्पिंडल, इलेक्ट्रोस्टेटिक ऑइलर, कॉइल मार्किंग सिस्टम, लोड सेल, थिकनेस गॉज, मिल स्टैंड मोटर्स और मिल स्टैंड एमवी ड्राइव सिस्टम, ऑटोमेशन सिस्टम, आदि।
13.5	**सीआरएम (बेल एनीलिंग फर्नेस)** (बाउंड्री लिमिट: फर्नेस बेस से पोस्ट शीतलन उपस्कर तक)	55%	• फर्नेस, स्वचालन प्रणाली, आदि।

13.6	**सीआरएम (कलर कोटिंग लाइन)** (बाउंड्री लिमिट: सीसीएल में प्रवेश से निकास तक)	80%	• कोटर, कोटिंग थिकनेस गेज, डिजिटल प्रिंटर, टेंशन लेवलर, स्वचालन आदि।
14	**लॉन्ग उत्पाद मिल्स**		
14.1	**बारमिल/डब्लूआरएम/एमएम/एलएसएम** (बाउंड्री लिमिट: फर्नेस प्रवेश से लेकर प्रेषण तक)	75%	• फास्ट फिनिशिंग ब्लॉक, रोल टर्निंग लेथ, प्रोफाइल गेज, स्वचालन प्रणाली आदि।
14.2	**रेल मिल/भारी संरचनात्मक मिल** (बाउंड्री सीमा: सामग्री हैंडलिंग को छोड़कर फर्नेस प्रवेश से लेकर रेल वेल्डिंग संयंत्र के निकास तक)	45%	• मिल स्टैण्ड, मिल मोटर एवं ड्राइव सिस्टम, हीट ट्रीटमेंट सुविधा, स्ट्रेटनिंग मशीन, एनडीटी सुविधाएं, वेल्डिंग मशीन, प्रोफाइल गेज, हॉट सॉ, कोल्ड सॉ, हॉट मार्किंग मशीन, रोल टर्निंग लेथ, सॉ ग्राइंडिंग मशीन, स्वचालन प्रणाली सिस्टम आदि।
15	**व्हील संयंत्र** (तैयार पहिये के लिए राउंड/इनगोट की प्राप्ति)	30%	• सर्कुलर सॉ, फोर्जिंग प्रेस, व्हील रोलिंग मिल, व्हील डिशिंग प्रेस, व्हील स्टैम्पिंग मशीन, रिम स्पैइंग मशीन, मोबाइल चार्जर, (हैंडलिंग रोबोट), मशीनिंग सुविधाएं, परीक्षण सुविधाएं, स्वचालन प्रणाली आदि।
16	**रिफ्रैक्टरी ब्रिक** (कच्चे माल की प्राप्ति से लेकर तैयार ब्रिक तक)	50%	• हाइड्रोलिक प्रेस
17	**इलेक्ट्रिकल** (विद्युत गुणवत्ता प्रणाली)	30%	• एमवी स्टेटकॉम (स्टेटिक सिंक्रोनस कम्पेन्सेटर) प्रणाली

परिशिष्ट-ग

लौह एवं इस्पात क्षेत्र में स्वदेशी प्रौद्योगिकियों को बढ़ावा देना

1) **उद्देश्य:**
इस्पात विनिर्माण के सभी चरणों में स्वदेशी प्रौद्योगिकियों को अपनाने, विकास और विस्तार को प्रोत्साहित करके भारतीय लौह एवं इस्पात क्षेत्र में आत्मनिर्भरता को बढ़ावा देना।

2) **विषय क्षेत्र:**
यह नीति इस्पात बनाने या इस्पात विनिर्माण संयंत्र स्थापित करने वाले केन्द्रीय सार्वजनिक क्षेत्र के उद्यमों पर लागू होती है।

3) **नीति निदेश:**

3.1 ऐसे मामले जहां पहले की इंजीनियरिंग और आपूर्ति के लिए प्रौद्योगिकी और प्रमाण उपलब्ध हैं, लेकिन वर्तमान क्षमता आवश्यकता से मेल नहीं खाते हैं, ऐसे मामलों में स्वदेशी प्रौद्योगिकी प्रदाताओं के लिए निम्नलिखित शर्तें लागू होंगी:

3.1.1 उत्पादन क्षमता प्रस्तावित संयंत्र की क्षमता का 30% होगी

3.1.2 विक्रेताओं के साथ स्पष्ट गठजोड़ की उपलब्धता

3.1.3 प्रस्तावित संयंत्र की क्षमता के कम से कम 75% के लिए परियोजनाओं की विस्तृत इंजीनियरिंग का अनुभव

3.2 ऐसे मामले जहां प्रौद्योगिकी उपलब्ध है, लेकिन पहले आपूर्ति के लिए कोई संदर्भ उपलब्ध नहीं है, ऐसे मामलों में स्वदेशी प्रौद्योगिकी प्रदाताओं के लिए निम्नलिखित शर्तें लागू होंगी:

3.2.1 स्वदेशी प्रौद्योगिकी आपूर्तिकर्ता ने प्रस्तावित परियोजना की कम से कम 75% विशेषताओं से मेल खाते हुए परियोजनाओं की विस्तृत इंजीनियरिंग की है

3.2.2 स्वदेशी प्रौद्योगिकी आपूर्तिकर्ता ने प्रस्तावित परियोजना की महत्वपूर्ण विशेषताओं से 100% मेल खाते हुए विस्तृत इंजीनियरिंग की है

3.2.3 विक्रेताओं के साथ स्पष्ट गठजोड़ की उपलब्धता

3.2.4 प्रौद्योगिकी उपलब्धता के प्रमाणिक साक्ष्य (अन्य पर्याप्त साक्ष्य पर आईपीआर)

4) **कार्यान्वयन निरीक्षण:**

इस्पात मंत्रालय द्वारा गठित स्थायी समिति कार्यान्वयन की निगरानी करेगी, विवादों का समाधान करेगी तथा पात्रता एवं प्रोत्साहन मानदंडों को समय-समय पर अद्यतन करेगी।

प्रपत्र- 1

लौह एवं इस्पात उत्पादों/ पूंजीगत माल में घरेलू मूल्यवर्धन के संबंध में 100/- रुपए मूल्य के स्टाम्प पेपर पर दिए जाने के लिए स्व-प्रमाणन शपथ-पत्र हेतु प्रारूप

तारीख:

मैं _____ सुपुत्र, सुपुत्री, पत्नी, _____, निवासी _____ _____ एतद्द्वारा निष्ठापूर्वक निम्नानुसार वचन देता हूँ और घोषण करता हूँ:

कि मैं अधिसूचना सं. : _____ के माध्यम से जारी की गई भारत सरकार की नीति के नियम और शर्तों का पालन करने के लिए सहमत हूँ।

कि यहां नीचे दी गई सूचना मेरे सर्वोत्तम ज्ञान और विश्वास के अनुसार सही है और मैं घरेलू मूल्यवर्धन का आकलन करने के प्रयोजन से प्रापण एजेंसी(यों) के समक्ष संगत रिकार्ड प्रस्तुत करने का वचन देता हूं।

कि सभी इनपुट्स के लिए घरेलू मूल्यवर्धन जिसमें उक्त लौह एवं इस्पात उत्पाद शामिल हैं का सत्यापन मेरे द्वारा कर लिया गया है और मैं उसमें किये गये दावों की सत्यतता के लिए जिम्मेदार हूं।

कि इसमें उल्लिखित उत्पाद घरेलू मूल्यवर्धन सही नहीं पाये जाने और मूल्यवर्धन के लिए निर्धारित मानदंडों को पूरा न किये जाने की स्थिति में, घरेलू मूल्यवर्धन का आकलन करने के प्रयोजन से प्रापण एजेंसी(यों) के आकलन के आधार पर मैं 36 महीनों की अवधि के लिए किसी सरकारी निविदा के लिए अयोग्य ठहराया जाऊंगा। इसके अतिरिक्त मैं इस प्रकार के आकलन की सभी लागतों का वहन करूंगा।

कि मैंने अधिसूचना संख्या _____ जिसमें सरकारी अधिप्राप्ति में घरेलू स्तर पर निर्मित लौह एवं इस्पात उत्पादों को वरीयता दी गई है, में संदर्भित सभी शर्तों का पालन किया है और यह कि प्रापण एजेंसी को एतद्द्वारा अधिकार दिया जाता है कि वह मेरे ईएमडी को जब्त करे। यह भी वचन देता हूं कि मैं आकलन की लागत का भुगतान करूंगा और निविदा दस्तावेज में यथा उल्लिखित सभी शास्ति राशि का भुगतान करूंगा।

मैं 8 वर्षों की अवधि के लिए कम्पनी के रिकॉर्ड में निम्नलिखित सूचना रखने के लिए सहमत हूं और किसी सांविधिक प्राधिकारी को सत्यापन के लिए इसे उपलब्ध कराऊंगा।

i. बोलीदाता का नाम और ब्यौरा (पंजीकृत कार्यालय, विनिर्माण इकाई का स्थान, कानूनी प्रतिष्ठान की प्रकृति)

ii. वह तारीख जब यह प्रमाण पत्र जारी किया गया है।

iii. लौह एवं इस्पात उत्पाद जिसके लिए यह प्रमाण पत्र प्रस्तुत किया गया है।

iv. प्रापण एजेंसी जिसे यह प्रमाण पत्र प्रस्तुत किया गया है।

v. दावा की गई घरेलू मूल्यवर्धन की प्रतिशतता और क्या यह निर्धारित घरेलू मूल्यवर्धन के थ्रेशोल्ड वेल्यू को पूरा करता है।

vi. विनिर्माता(ओं) इकाई का नाम और संपर्क विवरण

vii. लौह एवं इस्पात उत्पादों की निवल बिक्री कीमत

viii. संयंत्र तक भाड़ा, बीमा और रखरखाव

ix. लौह एवं इस्पात उत्पादों का निर्माण करने के लिए उपयोग किए जाने वाले इनपुट इस्पात (आयातित) की सूची और कुल लागत मूल्य।

x. घरेलू स्तर पर इनपुट इस्पात की सूची और कुल लागत

xi. यदि इनपुट इन हाऊस नहीं हो, तो कृपया आपूर्तिकर्ताओं से प्राप्त घरेलू मूल्यवर्धन प्रमाणपत्र संलग्न करें।

xii. आयातित इनपुट इस्पात के लिए, सीआईएफ मूल्य के ब्रेक-अप के साथ भारतीय पोर्ट पर लैंडेड कोस्ट, शुल्क एवं कर, पोर्ट हैंडलिंग संबंधी शुल्क और अंतर्देशीय भाड़े की लागत का ब्यौरा।

(इकाई/फर्म का नाम) के लिए तथा की ओर से

अधिकृत हस्ताक्षरकर्ता (निदेशक बोर्ड द्वारा विधिवत अधिकृत किये जाने के लिए)

<नाम, पदनाम और संपर्क सं. की प्रविष्टि करें>

[फा. सं. 8(2)/2023-आई डी-I]

अभिजीत नरेंद्र, संयुक्त सचिव

MINISTRY OF STEEL

NOTIFICATION

New Delhi, the 26th May, 2025

G.S.R. 341(E).— In supersession of earlier Domestically Manufactured Iron & Steel Products Policy, the revised Domestically Manufactured Iron & Steel Products Policy-2025 for providing preference to Domestically Manufactured Iron & Steel Products in Government procurement is hereby published for general information.

POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT- REVISED, 2025

1. **Background**

1.1. This policy provides preference for Domestically Manufactured Iron and Steel Products (DMI&SP) in Government procurement.

1.2. The policy applies to procurement of iron & steel products notified in Appendix A. In Appendix B, the minimum domestic content and an exempted list of capital goods for manufacturing iron & steel products which can be imported have been listed. Appendix C contains the policy for promoting the procurement of technology from the indigenous technology suppliers.

2. **Definitions**

2.1. **Bidder** may be a domestic/ foreign manufacturer of iron & steel or their selling agents/ authorized distributors/authorized dealers/ authorized supply houses or any other company engaged in the bidding of projects funded by Government agencies.

2.2. **Domestically Manufactured Iron & Steel Products** are those iron and steel products that are manufactured by entities that are registered and established in India, including in Special Economic Zones (SEZs).

2.3. **Domestic Manufacturer** is a manufacturer of iron & steel products conforming to guidelines in section 7 and the definition of 'manufacturer' as per the Central Excise Act.

2.4. **Domestic value addition** means the amount of value added in India which shall be the total value of the item to be procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of the total value of the item to be procured, in percent. The 'domestic value addition' definition shall be in line with the DPIIT guidelines and shall be suitably amended in case of any changes by DPIIT in the future. For the purpose of this policy document, domestic value addition and local content have been used interchangeably.

$$\% \text{ Domestic value addition} = \frac{\{\text{Total value of the item to be procured (excluding net domestic indirect taxes)} - \text{The value of imported content in the item (including all customs duties)}\}}{\{\text{Total value of the item to be procured}\}} \times 100\%$$

2.5. **Finished Steel** shall mean flat and long products, which can be subsequently

processed into manufactured items.

2.6. **Government** for the purpose of the Policy means Government of India.

2.7. **Government agencies** include Government PSUs, Societies, Trusts, and Statutory bodies set up by the Government of India.

2.8. **Indigenous Technology:** A technology shall be deemed to be Indigenous technology if, at least 51 % of the entity's equity is held by Indian residents and the IPR is owned or co-owned by an Indian entity or licensed exclusively to them and the core engineering R&D, and project execution capabilities reside in India.

2.9. **L1** means the lowest tender or the lowest bid or the lowest quotation received in a tender, bidding process, or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

2.10. **MoS** shall mean Ministry of Steel, Government of India.

2.11. **Margin of purchase preference** means the maximum extent to which the price quoted by a domestic supplier may be above L1 for the purpose of purchase preference. In the case of DMI&SP policy, the margin of purchase preference shall be 20% for items in Appendix B.

2.12. **Melt & Pour** is defined as the steel that has been produced in a steel-making furnace and poured into its first solid shape. The location where this process takes place is called the country of melt and pour (COM). The COM is the original location where crude steel is first produced in a liquid state and poured into its first solid shape. The first solid shape can be a semi-finished product, like a slab, billet, ingot, or a finished steel mill product.

2.13. **Net Selling Price** shall be the invoiced price excluding net domestic taxes and duties.

2.14. **Semi-Finished Steel** shall mean Ingots, billets, blooms, and slabs, which can be subsequently processed into finished steel.

3. **Exclusions**

3.1. Waivers may be granted by the Ministry of Steel to all such Government procurements subject to the below conditions:

3.1.1. Where specific grades of steel are not manufactured in the country, or

3.1.2. Where the quantities as per the demand of the project cannot be met through domestic sources.

3.2. Exemption requests shall be submitted to the Standing Committee along with sufficient proof of unavailability of iron & steel products domestically.

4. **Standing Committee**

4.1. A Standing Committee chaired by the Secretary (Steel), shall oversee the implementation of the policy.

4.2. The Committee shall comprise of experts drawn from Industry/Industry

Association/Government Institution or Body/Ministry of Steel. The said Committee in MoS shall have the mandate for the following:

4.2.1. Monitor the implementation of the policy.

4.2.2. Review and notify the list of Iron & Steel products, the domestic content requirement criteria and policy directives as mentioned in Appendix A, Appendix B and Appendix C.

4.2.3. Issue necessary clarifications for implementation of the policy including grant of exclusions to procuring agencies as per Para 3.

4.2.4. Constitute a grievance redressal committee for preliminary examination of complaints related to implementation of this policy.

4.2.5. Issue directions for suitable action to Ministries/Departments concerned in case of non-compliance with this policy by the procuring agency and advise.

4.3. Wherever a procuring entity concludes that an unreasonably high price has been quoted by the sole bidder/manufacturer, the matter may be referred to the Committee. In such cases, the procuring entity would be required to substantiate its case with complete and thorough documentation.

4.4. Specifying foreign certifications/unreasonable technical specifications in bid document is a restrictive and discriminatory practice against local suppliers. If foreign certification is required to be stipulated because of non-availability of Indian Standards and/or for any other reason, the same shall be done only after written approval of the Committee.

5. **Applicability**

5.1. The policy applies to every Ministry or Department of Government and all agencies/entities under their administrative control and to projects funded by these agencies for the purchase of iron & steel products for government projects. All Central Sector Schemes (CS)/Centrally Sponsored Schemes (CSS) for which procurement is made by States and Local Bodies, come within the purview of this Policy if that project/ scheme is fully/partly funded by the Government of India.

5.2. The policy applies to public sector steel manufacturers and agencies/entities under their administrative control for purchase of capital goods (Appendix-B) for manufacturing iron & steel products.

5.3. Appendix-B contains the exemption list of capital goods used in manufacturing iron & steel products which can be imported, and the minimum domestic content requirement for respective packages. The domestic value addition for Capital Goods, as indicated, is subject to change; for example, if some capital goods components can be manufactured in the country, the domestic value addition percentage may go up.

5.4. A purchase preference of 20% is applicable for capital goods used in steel manufacturing. For example, if the lowest bidder (L1) for an importable capital good is a foreign company with a quoted price of INR 100 crores for the product package, under the policy, procurement preference of 20% will be applicable to a domestic

supplier of the same capital good.

5.5. Appendix-C contains directives and methodology for steelmaking CPSEs to procure from indigenous technology suppliers.

5.6. The policy shall apply to projects and non-projects where the total procurement value of iron and steel products (Appendix-A) in a contract is greater than Rs. 5 lakhs, on itemised basis.

5.7. No Global Tender Enquiry (GTE) shall be invited for tenders related to the procurement of iron and steel products (Appendix-A of the DMI&SP Policy). No Global Tender Enquiry (GTE) shall be invited for tenders related to the procurement of Capital Goods for manufacturing iron & steel products (Appendix-B of the DMI&SP Policy) having estimated value up to Rs. 200 Crore except with the approval of competent authority as designated by Department of Expenditure.

5.8. The policy applies to the purchase of iron & steel products by private agencies for fulfilling an EPC contract and/or any other requirement of a Ministry or Department of Government or their PSUs.

6. **Tender procedure for procurement**

6.1. Procuring agencies shall follow standard procurement procedures, in accordance with instructions of the Ministry of Finance and CVC while adhering to DMI&SP policy.

6.2. The tender document, for procurement of both Goods as well as for EPC contracts, should explicitly outline the qualification criteria for adherence to the requirement as mentioned in Appendix A and Appendix B.

6.3. Domestic manufacturers of products under Appendix-A and Appendix-B shall self-certify the local content as per form-1 placed in the policy, at the time of bidding.

6.4. Bidders who are selling agents/authorized distributors/authorized dealers/authorized supply houses of the domestic manufacturers of iron & steel products, covered by Appendix-A, are eligible to bid with self- certification on behalf of the domestic manufacturers under the policy, subject to the bidder furnishing an authorisation certificate issued by the domestic manufacturer at the time of delivery.

6.5. For products covered under Appendix B of the DMI&SP policy, the bidder shall furnish certification issued by the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) declaring that the capital goods to be used in iron & steel industry are domestically manufactured in terms of the domestic value addition prescribed.

6.6. If Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, due to restrictive tender conditions which have direct or indirect effect of barring Indian companies such as registration in the procuring country, execution of projects of specific value in the procuring country etc., it shall provide such details to the procuring entities for appropriate reciprocal action.

6.7. Entities of countries that have been identified by the Ministry of Steel as not allowing

Indian companies to participate in their Government procurement for any item related to the Ministry of Steel shall not be allowed to participate in Government procurement in India for all items related to Ministry of Steel, except for the list of items published by Ministry of Steel permitting their participation.

6.8. The stipulation above shall be part of all tenders including those on GeM portal invited by the Central Government procuring entities.

6.9. In case restrictive or discriminatory conditions against domestic suppliers are included in bid documents, an inquiry shall be conducted by the Administrative Department undertaking the procurement (including procurement by any entity under its administrative control) to fix responsibility for the same. Thereafter, appropriate action, administrative or otherwise, shall be taken against erring officials of procurement entities under relevant provisions. Intimation on all such action shall be sent to the Standing Committee under the DMI&SP policy.

6.10. A supplier debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities.

6.11. In case, the matter is referred to the Ministry of Steel, the grievance redressal committee set up under the MoS shall dispose of the complaint within 4 weeks of its reference and receipt of all documents from the bidder after taking into consideration, the view of the Government Agency. The bidder shall be required to furnish the necessary documentation in support of domestic value addition claimed in iron & steel products to the grievance redressal committee under MoS within 2 weeks of the reference of the matter.

6.12. Procuring agency shall define the penalties, in case of a wrong declaration by the bidder of the prescribed domestic value addition, in the tender document. The penalties may include forfeiting of the EMD, other financial penalties, and blacklisting of such manufacturer/service provider etc., in terms of extant rules.

7. Implementation monitoring by the Ministry of Steel

7.1. The policy provisions shall be applicable for 5 years from the date of publication and may further be extended at the discretion of the Ministry of Steel.

7.2. MoS shall be the nodal ministry to monitor the implementation of the policy.

7.3. Agencies covered under DMI&SP policy shall send declaration on a quarterly basis indicating the extent of compliance to the policy and reasons for non-compliance thereof, during the preceding financial year.

Appendix-A

List of iron and steel products which can only be procured from domestic sources

Sl. No.	Iron & Steel Products	HS code	Condition
1	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, hot rolled, not clad, plated or coated	7208	Melt & Pour
2	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, cold rolled (cold-reduced), not clad, plated or coated	7209	Melt & Pour
3	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, clad, plated or coated	7210	Melt & Pour
4	Flat-rolled products of iron or non-alloy steel, of a width of less than 600 mm, not clad, plated or coated	7211	Melt & Pour
5	Flat-rolled products of iron or non-alloy steel, of a width of less than 600 mm, clad, plated or coated	7212	Melt & Pour
6	Bars and rods, hot-rolled, in irregularly wound coils, of iron or non-alloy steel	7213	Melt & Pour
7	Other bars and rods of iron or non-alloy steel, not further worked than forged, hot rolled, hot-drawn or hot-extruded, but including those twisted after rolling	7214	Melt & Pour
8	Other bars and rods of iron or non-alloy steel	7215	Melt & Pour
9	Angles, shapes and sections of iron or non-alloy steel	7216	Melt & Pour
10	Wire of iron or non-alloy steel	7217	Melt & Pour
11	Flat-rolled products of stainless steel, of a width of 600 mm or more	7219	Melt & Pour
12	Flat-rolled products of stainless steel, of a width of less than 600 mm	7220	Melt & Pour
13	Other bars and rods of stainless steel; angles, shapes and sections of stainless steel	7222	Melt & Pour
14	Wire of other alloy steel	7229	Melt & Pour
15	Rails, railway or tramway track construction material of iron or steel	7302	Melt & Pour
16	Tubes, pipes and hollow profiles, of cast iron	7303	Melt & Pour
17	Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel	7304	Melt & Pour
18	Other tubes and pipes (for example, welded, riveted or similarly closed), having circular cross-sections, the external diameter of which exceeds 406.4 mm, of iron or steel	7305	Melt & Pour
19	Other tubes, pipes and hollow profiles (for example, open seam or welded, riveted or similarly closed), of iron or steel	7306	Melt & Pour
20	Tube or pipe fittings (for example, connectors/couplings, elbow sleeves), of iron or steel	7307	Melt & Pour
21	Bars and rods, hot-rolled, in irregularly wound coils, of stainless steel	7221	Melt & Pour
22	Wire of stainless steel	7223	Melt & Pour
23	Flat-rolled products of other alloy steel, of a width of 600 mm or more, including electrical steel	7225	Melt & Pour
24	Flat-rolled products of other alloy steel, of a width of less than 600 mm, including electrical steel	7226	Melt & Pour
25	Bars and rods, hot-rolled, in irregularly wound coils, of other alloy steel	7227	Melt & Pour

26	Other bars and rods of other alloy steel; angles, shapes and sections, of other alloy steel; hollow drill bars and rods, of alloy or non alloy steel	7228	Melt & Pour
27	Sheet piling of iron or steel, whether or not drilled, punched or made from assembled elements; welded angles, shapes and sections, of iron or steel	7301	Melt & Pour
28	Structures (excluding prefabricated buildings of heading 9406) and parts of structures	7308	Melt & Pour
29	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 whether or not lined or heat insulated, but not fitted with mechanical or Thermal equipment	7309	Melt & Pour
30	Tanks, casks, drums, cans, boxes and similar containers, for any material(other than compressed or liquefied gas), of iron or steel, of a capacity not exceeding 300L,whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment	7310	Melt & Pour
31	Containers for compressed or liquefied gas, of iron or steel	7311	Melt & Pour
32	Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated	7312	Melt & Pour
33	Barbed wire of iron or steel; twisted hoop or single flat wire, barbed or not, and loosely twisted double wire, of a kind used for fencing, of iron or steel	7313	Melt & Pour
34	Grill, netting and fencing, of iron or steel wire; expanded metal of iron or steel	7314	Melt & Pour
35	Chain and parts thereof, of iron or steel	7315	Melt & Pour
36	Anchors, grapnels and parts thereof, of iron or steel	7316	Melt & Pour
37	Articles of iron and steel	7317	Melt & Pour
38	Articles of iron and steel	7318	Melt & Pour
39	Articles of iron and steel	7319	Melt & Pour
40	Springs and leaves for springs, of iron or steel	7320	Melt & Pour
41	Stoves,ranges,grates,cookers(includingthosewithsubsidiaryboilersforcentral heating), barbecues, braziers, gas-rings, plate warmers and similar non- electric domestic appliances, and parts thereof, of iron or steel	7321	Melt & Pour
42	Radiators for central heating, not electrically heated, and parts thereof, of iron or steel; air heaters and hot air distributors, not electrically heated, incorporating a motor-driven fan or blower, and parts thereof, of iron or steel	7322	Melt & Pour
43	Tables and similar house hold articles and parts thereof, of iron or steel	7323	Melt & Pour
44	Sanitary ware and parts thereof, of iron or steel	7324	Melt & Pour
45	Other cast articles of iron or steel	7325	Melt & Pour
46	Electrical steel and other articles of iron or steel	7326	Melt & Pour
47	Railway or tramway passenger coaches, not self-propelled	8605	Melt & Pour
48	Railway or tramway goods vans and wagons, not self-propelled	8606	Melt & Pour
49	Parts of railway or tramway locomotives or rolling-stock; such as bogies, bissel-bogies, axles and forged wheels, and parts thereof	8607	Melt & Pour

Appendix- B

Indicative list of Capital Goods (non-exhaustive) which can be imported for Manufacturing Iron & Steel products, and minimum Domestic content applicable for the package

S. no.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
1	**Raw Material Handling System** (Boundary Limit – from Wagon Tippler to respective user units)	95%	Barrel Couplings, Heavy Duty Bearings, Crane Rail Lubrication System, Slew Ring Bearings, Tongs (Special), Vibration Isolation System (Spring Damper).
2	**Mineral beneficiation (iron ore and coal) equipment** (Boundary Limit: from Receiving of ROM at the crusher hopper, comminution, segregation, ore/coal processing up to final product preparation)	75%	• Wet High Intensity Magnetic Separator / High Gradient Magnetic Separator • Heavy Media Cyclone • Gyratory Crusher • Spiral Concentrator • Online Ash Analyser
3	**Mining Machinery** (Boundary Limit: Equipment for drilling, raising, haulage, and mine preparation)	80%	Dumper (above 220 tons pay load capacity), Hydraulic Excavators (above 10.5 Cubic meter bucket capacity)
4	**Coke Oven Battery** (Both top charged & stamp charged) (From Coal bunker to coke discharge bucket)	90%	Springs of the anchorage systems, COG booster, stamping train, bonding press
5	**Coke Dry Quenching Plant** (From Hot coke receiving bucket to discharge chute of cooling chamber)	90%	Mill fan & Motor Special Refractory for Twin Flue of Cooling Chamber.
6	**By-Product Plant** (From Primary Gas cooler to clean coke oven gas up to the network)	90%	Exhauster & Motor, burner of the clause kiln Catalyst, Tail gas analyzer, Palletization unit.
7	**Sinter Plant Equipment** (Boundary Limit – Receiving Bin for Raw Material to Vibro-Feeder below Product Sinter Bin)	75%	High Intensive Mixer & Granulator Unit, Pallet cars, Drive Sprocket, Main Drive with Gear Box of sinter machine, slide rail & curved rail, Hot Sinter breaker and Grizzly, Annular Dip Rail Cooler, LCI Drive system for Sinter Plant Exhauster application
8	**Pellet Plant Equipment** (Boundary Limit – Receiving Ground Hopper for flux & Binder, Belt Conveyor feeding IOF to product pellet belt conveyor)	85%	Pallet car, High Intensive Mixer, Balling Discs, Vertical roller mill, Drive/discharge end Sprocket assembly, Curved rail, Slide rails, Single deck roller screen and Double deck roller screen, Induration Machine Drive assembly, Level-2 automation

9	**Blast Furnace Equipment** **Boundary Limit:** **Input:** • **Raw material**- Top of bunkers of respective **material** • **Cold Blast**- Inlet of the snort valve • **Industrial water**- BF pump house **Output** • **Hot Metal-** Filled in the torpedo ladle • **Granulated Slag-** to the granulated slag yard	70%	• Bell less top gear box, upper seal device covering upper material gate and upper seal valve, lower seal device covering lower material gate and lower seal valve, Bleeder valve • Hearth Refractory (carbon blocks) • Top Recovery Turbine system (TRT) • Cu-staves • SGI Staves • Cast house equipment (Mud gun, Drilling machine and main trough Manipulator) • Probes, Profilometer & Stock level indicator (radar type) • Gas cleaning plant (AGS system) • Stove system – ceramic burner & technological valve • Waste Heat Recovery system • Turbo blowers • Ball Mill • PCI Injection System • Level-II automation
10	**Gas based Direct Reduction Plant Equipment** (Boundary Limit: Receipt of raw material at the top of the DRI reactor & discharge of hot DRI to EAF)	50%	• Reactor charging system • Reactor • Reactor discharging system • Pneumatic transfer to EAF • Discharge route to briquetting system • Briquetting feeding system • Briquetting system • Reduction gas circuit • CO_2 removal unit • Process gas heater • Reformer system • Heat Recovery System • Process Gas Compressors • Blowers • Seal Gas System • Flue Gas Fan/ Hot Fan • Process valves • Critical bellows • Critical refractories

			• Natural Gas pre-treatment system • Level-II automation
11	**Oxygen Plant 700 tpd & Above** (Boundary limit: Water, Power at oxygen plant boundary)	30%	• Main Air Compressor • Booster Air Compressor • Expansion Turbine • Reboiler • Cryogenic Pumps • Heat exchange elements of ASU
12	**Steel Making**		
12.1	**Hot Metal De- De-Sulphurization Station (HMDS) Unit with Co-Injection Process** (Hot metal from the blast furnace (BF) is received in a torpedo ladle or open-top ladle, undergoes desulfurization treatment to reduce "Sulphur (S)" content, and is then transferred to the BOF converter)	75%	• Injection Lance and automatic sampling Unit with auxiliaries • De-slagging Machines (slag raking machine) with auxiliaries • Temp. measuring and sampling device with auxiliaries
12.2	**Hot Metal De- De-Sulphurization Station (HMDS) Unit with Mechanical Stirrer (KR) Process** (Hot metal from the blast furnace (BF) is received in a torpedo ladle or open-top ladle, undergoes desulfurization treatment to reduce "Sulphur (S)" content, and is then transferred to the BOF converter)	70%	• Impeller, Impeller lifting & stirring equipment, Guide Frame with auxiliaries • De-slagging Machines (slag raking machine) with auxiliary facilities • Temp. measuring and sampling device with auxiliaries
12.3	**Basic Oxygen Furnace / LD Unit** [Treated hot metal is poured into the BOF converter, where it undergoes processing to convert it into steel, which is then supplied to the ladle furnace (LF)]	65 %	• Lance body with clamping, Lance carriage, Lance guide, Lance hoist & trolley, Lance copper tips with auxiliaries. • Pneumatic motors for emergency tilting drive. • Bottom stirring system, valve station & rotary joint along with auxiliaries • Valve stations for oxygen/ argon/ nitrogen with auxiliaries • Sub-lance system with auxiliaries • Container lab with all auxiliaries. • Automatic gas coupling (auto coupler) with auxiliaries. • Converter wrecking machine. • Converter tap hole changing machine • Refractory monitoring (laser) machine.

12.4	**Electric Arc Furnace Unit** (Primary materials such as scrap, DRI, pig iron, and hot metal in combination are converted into liquid steel using electrical energy to melt and refine the raw materials)	70%	• Electrode regulation system with auxiliaries • High current system including furnace transformer • Oxygen & Carbon Injection System with auxiliaries • Manual Temp Measuring & sampling Lance with auxiliaries
12.5	**Ladle Furnace Unit** [Liquid steel is processed/ treated to achieve the desired grade and held as buffer stock before being supplied to the continuous casting machine (CCM)]	70%	• Electrode regulation system with auxiliaries • Manual Temp Measuring & sampling Lance with auxiliaries
12.6	**RH/ RH-OB Unit** [The liquid steel is degassed to achieve the required dissolved gas levels and then supplied to the continuous casting machine (CCM)]	65%	• Gas Stirring System/ Lift Gas Stirring System Valve Stand with auxiliaries • Oxygen Lance System with auxiliaries • Hydris Measurement System with auxiliaries
12.7	**Continuous Casting Unit** (Slab Caster/ Billet/ Bloom Round/ Combi/ Beam Blank) [The liquid steel is cast into slabs, billets, or blooms in the continuous casting machine (CCM)]	65%	• Ladle slag detection system complete with auxiliaries • Copper tube and Plate, Mould oscillation Cylinder. • Rotary Union. • Continuous temperature measuring system with auxiliaries. • Torch cutting machine/ Emergency torch cutter along with auxiliaries • Deburrer machine along with electrical drive system with auxiliaries • Marking machine . • Roll gap checker complete with auxiliaries • Electromagnetic Stirrer (EMS)/ Electromagnetic Braking (EMBr) system along with auxiliaries •
13	**Flat Product Mills**		
13.1	**Hot Strip Mills/ Plate Mill** (Boundary Limit: Slab yard to Dispatch Bay, including auxiliaries)	50%	• De-scalars, mill stand, bed plates, backup rolls, Work Rolls, mill spindles, chocks, AGC cylinders, bending blocks & cylinders, shears, down coilers, anti-friction roll neck bearings, oil film bearings, mill reducers, load cells, thickness gauge, profile gauge,

			width gauge, levelers, roll grinding machines, Coil Marking Machine, Plate Marking Machine, mill stand motors & mill stand MV drive system, automation system, etc.
13.2	**CRM (PLTCM)** (Boundary Limit: Pickling line entry to mill exit)	50%	• Welding machine, tension leveler, mill stands, backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, roll bending and roll shifting cylinders, mill spindles, load cells, position transducers, Electrostatic Oiler, Side Trimmer, Steering System, Surface Inspection System, thickness gauges, laser speed gauge, tensiometer, Flatness Gauge, tension reel, mill reducers, mill stand motors & mill stand MV drive system, automation system etc.
13.3	**CRM (HDGL)** (Boundary Limit: entry to exit of HDGL including temper mill & tension leveler)	60%	• Welding machine, radiant tube furnaces, jet cooling system, coating pot with induction heating, pot rolls, air knife wiping system, tension leveler, width gauge, thickness gauge, coating thickness gauge, load cells, roll force cylinders, mill stand motors & mill stand drive system, automation system, etc.
13.4	**CRM (SPM)** (Boundary Limit: entry to exit of SPM)	50%	• Mill stands, backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, Electrostatic Oiler, Coil Marking System, load cells, thickness gauge, mill stand motors & mill stand MV drive system, automation system, etc.
13.5	**CRM (Bell Annealing Furnace)** (Boundary Limit: From furnace bases to post cooling equipment)	55%	• Furnace, automation system, etc.
13.6	**CRM (Color Coating Line)** (Boundary Limit: Entry to exit of CCL)	80%	• Coater, Coating thickness gauge, digital printer, tension leveler, automation, etc.
14	**Long Product Mills**		
14.1	**Bar Mill/ WRM/MM/ LSM** (Boundary Limit: From furnace entry to dispatch)	75%	• Fast finishing blocks, Roll turning lathes, Profile Gauge, automation systems, etc.
14.2	**Rail Mill/ Heavy Structural Mill** (Boundary Limit: From furnace entry	45%	• Mill stands, mill motor & drive system, heat treatment facility,

	to exit of the rail welding plant excluding material handling)		straightening machine, NDT facilities, welding machine, Profile Gauge, Hot Saw, Cold Saw, Hot Marking Machine, Roll Turning Lathe, Saw Grinding Machine, automation system, etc.
15	**Wheel Plant** (receipt of round/ingot to finished wheel)	30%	• Circular saw, forging press, wheel rolling mill, wheel dishing press, wheel stamping machine, rim spaying machine, mobile chargers, (Handling Robots),machining facilities, testing facilities, automation system etc.
16	**Refractory Brick** (Receipt of raw material to finished brick)	50%	• Hydraulic Press
17	**Electrical** (Power Quality System)	30%	• MVSTATCOM • (Static Synchronous Compensator) System

Appendix-C

Promotion of Indigenous Technologies in Iron & Steel Sector

1) Objective:
To promote self-reliance in the Indian iron and steel sector by incentivizing the adoption, development, and scale-up of indigenous technologies across all stages of steel manufacturing.

2) Scope:
This policy applies to Central Public Sector Enterprises involved in steelmaking or putting up a steel manufacturing plant.

3) Policy Directives:

3.1 In cases where technology and proof for earlier engineering & supply is available but does not match the present capacity requirement, following conditions will be applicable for indigenous technology providers:

3.1.1 Production capacity reference to be 30% of the capacity of the proposed plant

3.1.2 Availability of demonstrable tie ups with the vendors

3.1.3 Experience of detailed engineering of projects for at least 75% of the capacity of the proposed plant

3.2 In cases where technology is available but no reference for earlier supply is available, following conditions will be applicable for indigenous technology providers:

3.2.1 The indigenous technology supplier has done detailed engineering of projects matching at least 75% of the features of the proposed project

3.2.2 The indigenous technology supplier has done detailed engineering matching 100% of the critical features of the proposed project

3.2.3 Availability of demonstrable tie ups with the vendors

3.2.4 Demonstrable evidence of technology availability(IPR on other sufficient evidence)

4) Implementation Oversight:

The Standing Committee constituted by Ministry of Steel shall monitor implementation, resolve disputes, and update the eligibility and incentive criteria periodically.

Form-1

Format for Affidavit of Self Certification regarding Domestic Value Addition in Iron & Steel Products/capital goods to be provided on Rs. 100/-Stamp Paper

Date:

I _____S/o,D/o,W/o,_____Resident of _Hereby solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the policy of Government of India issued vide Notification No:_____.

That the information furnished hereinafter is correct to the best of my knowledge and belief and I undertake to produce relevant records before the procuring agency (ies) for the purpose of assessing the domestic value addition.

That the domestic value addition for all inputs which constitute the said iron & steel products has been verified by me and I am responsible for the correctness of the claims made therein.

That in the event of the domestic value addition of the product mentioned herein is found to be incorrect and not meeting the prescribed value-addition criteria, based on the assessment of procuring agency (ies) for the purpose of assessing the domestic value-addition, I will be disqualified from any Government tender for a period of 36 months. In addition, I will bear all costs of such an assessment.

That I have complied with all conditions referred to in the Notification No…..… wherein preference to domestically manufactured iron & steel products in Government procurement is provided and that the procuring agency (ies) is hereby authorized to forfeit and my EMD. I also undertake to pay the assessment cost and pay all penalties as specified in the tender document.

I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority.

i. Name and details of the Bidder (Registered Office, Manufacturing unit location, nature of legal entity)

ii. Date on which this certificate is issued

iii. Iron & Steel Products for which the certificate is produced

iv. Procuring agency to whom the certificate is furnished

v. Percentage of domestic value addition claimed and whether it meets the threshold value of domestic value addition prescribed

vi. Name and contact details of the unit of the manufacturer(s)

vii. Net Selling Price of the iron & steel products

viii. Freight, insurance and handling till plant

ix. List and total cost value of input steel (imported) used to manufacture the iron & steel products

x. List and total cost of input steel which are domestically sourced.

xi. Please attach domestic value addition certificates from suppliers, if the input is not in house.

xii. For imported input steel, landed cost at Indian port with break-up of CIF value, duties & taxes, port handling charges and in land freight cost.

For and on behalf of (Name of firm/entity)
Authorized signatory (To be duly authorized by the Board of Directors)
<Insert Name, Designation and Contact No.>

[F. No. 8(2)/2023-ID-I]

ABHIJIT NARENDRA, Jt. Secy.

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APPENDIX-V TO ITB

SHARING OF LAND BORDER WITH INDIA

SHARING OF LAND BORDER WITH INDIA

Following Restrictions under Rule 144(xi) of the General Financial Rules (GFRs), 2017- Department of Expenditure Order (Public Procurement No. 4) ref. No.F.7/10/2021-PPD (01) dated 23.02.2023 shall be applicable for this tender.

[The detailed guidelines are available on the website of DoE (https://doe.govin/)]

I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority as specified in the DoE Order referred above.

Further, any bidder (including an Indian bidder) who has a Specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.

[*The conditions relating to specified ToT (as shown in italics) should be incorporated only in the tenders which attract the restrictions due to specified ToT*]

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder from a country which shares a land border with India" for purpose of this Order means:-

a. An entity incorporated, established or registered in such a country; or
b. A subsidiary of an entity incorporated, established or registered in such a country; or
c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
d. An entity whose beneficial owner is situated in such a country; or
e. An Indian (or other) an agent of such an entity; or
f. A natural person who is a citizen of such a country; or
g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

IV. The beneficial owner for the purpose of (iii) above will be as under:

1. In case of accompany or limited liability partnership the beneficial owner is the natural person(s), who whether acting alone or together or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

   Explanation---

   a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. Of shares or capital or profits of the company.
   b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals.

4. Where no natural person is identified under (1) or (2) or (3) above the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another or to represent another in dealings with third person.

VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with "Competent Authority".

VII. The registration shall be valid at the time of submission of bid and at the time of acceptance of bid.

VIII. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution.

VII. Bidder mandatorily requires to submit "Certificate of Compliance" in the enclosed Form: A. This certificate need to be submitted in the Company's Letter Head and should be sealed and signed by the authorized signatory on behalf of the bidder. Non-submission of Form A may lead to disqualification for Techno-Commercial evaluation of the submitted bid.

In case at any stage pre or post order placement it is found that that the certification furnished is false their bid shall be summarily rejected or order terminated as applicable. NRL may at its discretion initiate penal action against such bidders which may include Black Listing Holiday Listing the party /encashment of EMD or PBG submitted as per contractual provision etc.

Note I: For better clarity and to obtain information in detail bidders are requested to go through the Govt Circular issued by the Department of Expenditure Govt of India to this effect.

******

FORM A

CERTIFICATE OF COMPLIANCE
(On Company's Letter Head)

To,
CGM (Commercial)
Numaligarh Refinery Limited
Numaligarh, Assam.

Sub: Certificate of Compliance

Bidder's Details :

Job Name :

RFQ No. :

Sl.	Bidder's Undertaking	Please put Yes (✓) or No (**X**), as applicable
1	(A) "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country".	
	(B) Or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [If applicable, evidence of valid registration by the Competent Authority shall be attached.]	
2	(A) "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority."	
	(B) Or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [If applicable, evidence of valid registration by the Competent Authority shall be attached.]	
3	(A) "I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that this bidder does not have any ToT arrangement requiring registration with the competent authority."	
	(B) "I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that this bidder has valid registration to participate in this procurement." [If applicable, evidence of valid registration by the Competent Authority shall be attached.]	

Place :

Date :

Signature of Authorized Signatory :

Name of Signatory :

Designation :

Seal of the Company :

Instructions for ONLINE EMD submission through the portal of HDFC Bank

The EMD must be submitted ONLINE within the submission due date & time specified in the NIT and tender document through the online portal of HDFC bank link: https://nrl.procure247.com.

a) User Manual for Bidders is available in NRL Website under https://www.nrl.co.in → Tenders → Tender Manual → EMD Online Deposit Manual (HDFC Bank Payment Portal)

b) Visit HDFC Bank Payment Portal URL: https://nrl.procure247.com
c) Click on 'Bidder Registration'
d) Bidder Registration Screen shall appear – Fill the mandatory details required and complete the process.
e) On successful submission of details in bidder registration form, bidder will get the system generated link to verify his/her email id and login to the website. Without verifying email id bidder may not be able to login to the system.
f) After successful email verification – please login with your user id and password
g) Bidder will receive system generate One Time Password (OTP) on their registered mobile number. In case not receiving of OTP please click Regenerate OTP and login.
h) After login Screen bidder can search the tenders and proceed for EMD payment.
i) Bidders' have to click on Payment Dashboard option available under Action tab
j) Payment Dashboard – Click on Pay to proceed further for the selection of payment mode.
k) Smart Hub – Bidders' can select the online payment and click on Pay to proceed further.
l) After click on Pay – Bidder will get an option for Cards and Net Banking. Bidders can select their preference and proceed further for the payment.
m) On successful payment bidder will receive system generated message on screen stating "EMD paid successfully"
n) Bidders' can also download the Payment receipt from Payment Dashboard.
o) Downloaded payment receipt – Bidders' can easily print the receipt and use it for their bidding purpose.
p) Since the HDFC Bank payment gateway is not under the CPPP/GeM, so the payment mode is mentioned as offline (BG) in the CPP portal and Advisory Bank: HDFC Bank in GeM portal. In case of CPPP tenders, bidder has to make a dummy entry in the EMD fields of CPPP by putting 'Transaction ID' (HDFC Bank payment receipt) as instrument no., payment date as issue date, any date as expiry date, and bank name as issuer details. Please upload the EMD payment receipt along with technical bid.
q) For any technical help, the bidders can contact HDFC Bank executive Mr. Tapan Desai at Mobile No: 8866287104 and email: tapan@tender247.com.

A receipt will be generated after successful payment. Bidder can take print out for onward submission with tender as well as save a soft copy of the receipt.

MSE bidders are required to submit valid MSE registration certificate as explained in Annexure-X instead of the EMD deposit receipt.

BANK GUARANTEE FOR CONTRACT PERFORMANCE SECURITY

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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PROFORMA OF BANK GUARANTEE CONTRACT PERFORMANCE SECURITY

Dear Sirs,

In consideration of the M/s Numaligarh Refinery Limited, 122 A, G.S. Road, Christian Basti, Guwahati - 781005, Assam, India (hereinafter called the Company which expression shall include its successors and assigns) having awarded to M/s ..... Constitution....., Address..... (hereinafter referred to as "The Contractor" which expression shall wherever the subject or context so permits include its successors and assigns) a supply contract in terms inter-alia, of the Company(s) letter of acceptance No./ Contract / Work / Purchase Order No.: ..... dtd. ..... and the General Purchase Conditions / General Conditions of Contract (as applicable for this contract) of the Company and upon the conditions of contractor's furnishing for the performance of contractor's obligations and/or discharge of contractor's liability under and/or in connection with the said contract up to a sum of (in figures) ..... (in words) .....(only) amounting to 3% (three percent) of the contract value.

We (name)..... (Constitution)..... (hereinafter called the Bank which expression shall include its successors and assigns) hereby jointly and severally undertake and guarantee to pay the Company in (currency) forthwith on first demand in writing and without protest or demur any and all moneys anywise payable by the Contractor to the Company under, in respect or in connection with the said contract inclusive of all the Company's losses and damages and costs (inclusive between attorney and client), charges and expenses and other moneys anywise payable in respect of the above specified in any notice of demand made by the Company to the Bank with reference to this guarantee upto an aggregate limit of (in figures) ..... (in words) ....only.

And the Bank hereby agrees with the Company that:

i) The guarantee/undertaking shall be a continuing Guarantee/Undertaking and shall remain valid and irrevocable for all claims of the Company and liabilities of the Contractor arising upto and until midnight of..... with a claim period until six (6) months thereafter, i.e., until midnight of ……

ii) This Guarantee/Undertaking shall be in addition to any other guarantee or security whatsoever that the Company may now or at any time any wise have in relation to the Contractor's obligations/liabilities under and/or in connection with the said contract and the Company shall have full authority to take recourse to or reinforce this security in preference to the other security(ies) at its sole discretion, and no failure on the part of the Company in enforcing or requiring enforcement of any other security shall have the effect of releasing the Bank from its full liability hereunder.

iii) The Company shall be at liberty without reference to the Bank and without affecting the full liability of the Bank hereunder to take any other security in respect of the Contractor's obligations and/or liabilities under or in connection with the said contract, and to vary the terms vis-a -vis the contractor of the said contract or to grant time and or indulgence to the contractor or to reduce or to increase or otherwise vary the prices of the total contract value or to release or to forebear from enforcement of all or any of the obligations of the contractor under the said contract and/or the remedies of the Company under any other security (ies) now or hereinafter held by the indulgence /or arrangements with the contractor or release or forbearance whatsoever which under the laws relating to securities shall but for these Provisions have the effect of releasing the Bank from its full liability to the Company hereunder or of prejudicing rights of the Company against the Bank.

iv) This guarantee/undertaking shall not be determined or affected by the liquidation or winding up dissolution or change of constitution or insolvency of the contractor but that in all respects and for all purpose be binding and operative until payment of all moneys payable to the Company in terms hereof.

v) The Bank hereby waive all rights at any time inconsistent with the terms of this Guarantee/Undertaking and the obligations of the Bank in terms thereof shall not be any wise affected or suspended by reason of any dispute or disputes having been raised by the contractor (Whether or not pending before any Arbitrator Officer, Tribunal or Court) or any denial of liabilities by the contractor or any other order of communication whatsoever by the contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to the Company in terms hereof.

vi) The amount stated in any notice of demand addressed by the Company to the Bank as liable to be paid to the Company by the contractor or as suffered or incurred by the Company on account of any losses or damages of costs, charges and/or expenses shall as between the Bank and the Company be exclusive of the amount so liable to be paid to the Company or suffered or incurred by the Company, as the case may be, and payable by the Bank to Company in terms hereof.

vii) Not withstanding anything contained herein above, unless a claim or demand under this guarantee is made against the bank within six months from the date of expiry of the Guarantee, all the rights of the company under this guarantee shall be forfeited and the bank shall be released and discharged from all liability hereunder unless this guarantee shall have been previously extended.

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BANK GUARANTEE FOR INDIGENOUS PURCHASE (WARRANTY/GUARANTEE)

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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PROFORMA OF BANK GUARANTEE FOR INDIGENOUS PURCHASE (WARRANTY/GUARANTEE)

This deed of Guarantee made this …….day of …… ……by …….. Bank registered under …… and having its registered office at …….. and wherever the context so requires includes its successors and assigns (hereinafter called "The Surety") for the favour of M/s Numaligarh Refinery Limited, a company under Public Sector, registered under Indian Companies Act of 1956 having its registered office at 122A, G.S. Road, Christanbasti Guwahati-781 005 wherever the context so requires includes its successors and assigns (hereinafter called as "The Company").

WHEREAS

1. The Company has placed an Order No. . . ……. Dated …… (hereinafter referred to as "the order") with M/s …… a company registered under Indian

Companies Act 1956 having its registered office at …… …….. And whereas the context so requires includes its successors and assigns (hereinafter called or referred to as "the Supplier".

2. Under the terms of the order, the Supplier is required to furnish the Company at his own cost a Bank Guarantee for an amount of Rs. …….., being the amount equivalent to … …… percentage of the total value of the order for fulfilling the contract.

3. The Surety at the request of the Suppliers, agreed to issue Bank Guarantee in terms of the said order on behalf of the Supplier and the Company has agreed to accept the same. It is hereby stipulated and agreed that the Supplier shall repair or replace free of cost Equipment, Machinery, its parts and components found defective on account of workmanship or defective material or inferior manufacturer, as mentioned in Warranty and Guarantee Clause of the Order for period of …… from the date of commissioning/installation OR from the date of delivery.

4. The Surety binds himself to pay to the extent of Rs. …….. in case of failure on the parts of the Supplier to perform this Guarantee provided the Company informs the Surety in writing to this effect.

5. Notwithstanding anything contained hereinafter the liability of the Surety in respect of this Guarantee is restricted to Rs. ……. (Rupees …… only) and it will remain in force till ……. unless a suit or action to enforce a claim under Guarantee is filled against us within six months from …… (Which is date of expiry of guarantee). However, if the contract for which this Guarantee is given is not completed or fully performed, the Surety (Bank) hereby agrees to further extend the Guarantee till such time as is required to fulfill the contract.

6. The Surety shall not be discharged or released from this Guarantee by any arrangement between the Company and the Supplier with or without the consent of the Surety or by any alteration in the obligation of the parties or by any indulgence, forbearance, whether as to payment, time performance or otherwise.

In witness whereof the said Surety Subscribed and set its name and seal hereupto …… (the day).

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BANK GUARANTEE FOR IMPORTED PURCHASE (WARRANTY/GUARANTEE)

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as “7037” and Particulars (to be mentioned in Row 1) as “NRL140025551” should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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PROFORMA OF BANK GUARANTEE FOR IMPORTED PURCHASE (WARRANTY/GUARANTEE)

Dear Sirs,

In consideration of the M/s Numaligarh Refinery Limited, 122 A, G.S. Road, Christianbasti, Guwahati - 781005, Assam, India (hereinafter called the Company which expression shall include its successors and assigns) having awarded to M/s (Name)..... Constitution..... (address)..... (hereinafter referred to as "The Supplier" which expression shall wherever the subject or context so permits include its successors and assigns) a supply contract in terms inter-alia, of the Company(s) letter No. ..... dtd. ..... and the General Purchase Conditions of the Company and upon the conditions of supplier's furnishing for the performance of supplier's obligations and/or discharge of supplier's liability under and/or in connection with the said supply contract up to a sum of (in figures) ..... (in words) .....(only) amounting to …….. % (…….percent) of the total contract value.

We (name)..... (Constitution)..... (hereinafter called the Bank which expression shall include its successors and assigns) hereby jointly and severally undertake and guarantee to pay the Company in (currency) forthwith

on first demand in writing and without protest or demur any and all moneys anywise payable by the Supplier to the Company under, in respect or in connection with the said supply contract inclusive of all the Company's losses and damages and costs (inclusive between attorney and client), charges and expenses and other moneys anywise payable in respect of the above specified in any notice of demand made by the Company to the Bank with reference to this guarantee upto an aggregate limit of (in figures) ..... (in words) ....only.

And the Bank hereby agrees with the Company that :

i) The guarantee/undertaking shall be a continuing Guarantee/Undertaking and shall remain valid and irrevocable for all claims of the Company and liabilities of the Supplier arising upto and until midnight of.....

ii) This Guarantee/Undertaking shall be in addition to any other guarantee or security whatsoever that the Company may now or at any time any wise have in relation to the Supplier's obligations/liabilities under and/or in connection with the said supply contract and the Company shall have full authority to take recourse to or reinforce this security in preference to the other security(ies) at its sole discretion, and no failure on the part of the Company in enforcing or requiring enforcement of any other security shall have the effect of releasing the Bank from its full liability hereunder.

iii) The Company shall be at liberty without reference to the Bank and without affecting the full liability of the Bank hereunder to take any other security in respect of the Supplier's obligations and/or liabilities under or in connection with the said supply contract, and to vary the terms vis-a -vis the supplier of the said supply contract or to grant time and or indulgence to the supplier or to reduce or to increase or otherwise vary the prices of the total contract value or to release or to forebear from enforcement of all or any of the obligations of the supplier under the said supply contract and/or the remedies of the Company under any other security (ies) now or hereinafter held by the indulgence /or arrangements with the supplier or release or forbearance whatsoever which under the laws relating to securities shall but for these Provisions have the effect of releasing the Bank from its full liability to the Company hereunder or of prejudicing rights of the Company against the Bank.

iv) This guarantee/undertaking shall not be determined or affected by the liquidation or winding up dissolution or change of constitution or insolvency of the supplier but that in all respects and for all purpose be binding and operative until payment of all moneys payable to the Company in terms hereof.

v) The Bank hereby waive all rights at any time inconsistent with the terms of this Guarantee/Undertaking and the obligations of the Bank in terms thereof shall not be any wise affected or suspended by reason of any dispute or disputes having been raised by the supplier (Whether or not pending before any Arbitrator Officer, Tribunal or Court) or any denial of liabilities by the supplier or any other order of communication whatsoever by the supplier stopping or preventing or purporting to stop or prevent any payment by the Bank to the Company in terms hereof.

vi) The amount stated in any notice of demand addressed by the Company to the Bank as liable to be paid to the Company by the supplier or as suffered or incurred by the Company on account of any losses or damages of costs, charges and/or expenses shall as between the Bank and the Company be exclusive of the amount so liable to be paid to the Company or suffered or incurred by the Company, as the case may be, and payable by the Bank to Company in terms hereof.

v) Not withstanding anything contained herein above, unless a claim or demand under this guarantee is made against the bank within six months from the date of expiry of the Guarantee, all the rights of the company under this guarantee shall be forfeited and the bank shall be released and discharged from all liability hereunder unless this guarantee shall have been previously extended.

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BANK GUARANTEE FOR SECURITY DEPOSIT

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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PROFORMA OF BANK GUARANTEE FOR SECURITY DEPOSIT

(ON NON – JUDICIAL PAPER OF APPROPRIATE VALUE)

Required to be submitted by successful agency after placement of work order / letter of acceptance

To

Numaligarh Refinery Ltd.
122A, G.S. Road, Christianbasti
Guwahati –781005, Assam

Dear Sirs:

M/s …….. have taken tender for the work of ……
……..…….. (Work Order no…….) for Numaligarh Refinery Limited, 122A, G.S. Road, Christianbasti, Guwahati-781005.

The tender conditions of contract provide that the Contractor shall pay a sum of Rs……..… (Rupees ……) as Security Deposit in the form there in mentioned. The form of payment of security deposit includes guarantee executed by Nationalized Schedule 'A' Bank, undertaking full responsibility to indemnify Numaligarh Refinery Ltd. in case of default.

The said ……. has approached us and at their request and in consideration of the premises we having our office at ……. have agreed to give such guarantee as hereinafter mentioned.

1. We hereby undertake and agree with you that if default shall be made by M/s…… in performing any of the terms and condition of the tender or in payment of any money payable to Numaligarh Refinery Ltd. We shall on demand pay to you in such manner as you direct the said amount of Rupees …… only or such portion thereof not exceeding the said sum as you from time to time require.

2. You will have the full liberty without reference to us and without affecting this guarantee postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said ……. and to enforce or to forebear from endorsing any powers or rights or by reason of time being given to said …… which under law relating to the sureties would but for provision have the effect of releasing us.

3. Your right to recover the said sum of Rs. …….. (Rupees …….) from us in manner aforesaid will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said M/s ……. and /or that any dispute or disputes are pending before any officer, tribunal or court.

4. The guarantee herein contained shall not be determined or affected by the liquidation or winding up dissolution or changes of constitution or insolvency of the said, but shall in all respects and for all purposes be binding and operative until payment of all money due to you in respect of such liabilities is paid.

5. Our liability under this guarantee is restricted to (Rupees. ……). Our guarantee shall remain in force until …….. unless a suit or action to enforce a claim under Guarantee is filled against us within six months from …… (Which is date of expiry of guarantee) all your rights under the said guarantee shall be forfeited and we shall be relived and discharged from all liabilities thereunder.

6. We have power to issue this guarantee in your favour under Memorandum and Articles of Association and the undersigned has full power to do under the power of Attorney dated ……. granted to him by the Bank.

Yours faithfully,

_____ Bank
By its Constituted Attorney

Signature of a person duly
Authorized to sign on behalf
Of the Bank

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BANK GUARANTEE AGAINST MILESTONE PAYMENT

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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PROFORMAA FOR GUARANTEE AGAINST MILESTONE PAYMENT

(TO BE EXECUTED ON NON-JUDICAL STAMP PAPER OF APPROPRIATE VALUE)

To,
Numaligarh Refinery Limited,
Pankagrant, PO: Numaligarh Refinery Project,
Dist-Golaghat (Assam), India, PIN-785699

Subject: Bank Guarantee for [insert purpose]

WHEREAS

A. [insert *name of the Contractor)* ("Contractor") and the Numaligarh Refinery Ltd. ("NRL") have entered into a Contract Agreement dated *(insert date of Contract Agreement)* ("Agreement"), whereby NRL has authorized the Contractor to execute the Works related to [insert package name].

B. NRL has agreed to release [insert %] of the Contract Price to the Contractor, inter-alia, a sum of Rs._ (Rupees only) (" Milestone Payment"), upon the condition, *inter* a/la, that the Milestone Payment shall without prejudice to any other mode of recovery available to NRL be recoverable by NRL by deduction from the gross accepted amount of any Running Account Bills and the Final Bill of the Contractor commencing from the first Running Account Bill of the Contractor, and meanwhile, the Milestone Payment shall be secured by way of guarantee from a Bank (as defined hereinafter).

C. We (name of the bank) having our registered office at ..... and one of itsbranches at (hereinafter referred to as the "Bank"), at the request of the Contractor, do hereby in terms of the Agreement, irrevocably, unconditionally and without reservation guarantee ("Guarantee") the due and faithful fulfilment and compliance of the terms and conditions of the Agreement by the Contractor and unconditionally and irrevocably undertake to pay NRL forthwith on first demand without any demur, reservation, recourse, contest, protest or proof or satisfaction or condition and without reference to the Contractor, an amount of Rs. |insert amount} ("Guarantee Amount").

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees and undertake to pay to NRL upon occurrence of any failure or default in the due and faithful performance of all or any of the Contractor's obligations or otherwise, under and in accordance with the provisions of the Agreement, on its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as NRL shall claim, without NRL being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from NRL, that there is an amount due and outstanding from the Contractor, or the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that NRL shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations under the Agreement and its decision in this regard shall be final and binding on the Bank, notwithstanding any differences between NRL and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.

3. In order to give effect to this Guarantee, NRL shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/ or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.

4. It shall not be necessary, and the Bank hereby waives any necessity, for NRL to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.

5. NRL has the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfilment and/or performance of all or any of the obligations of the Contractor contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by NRL against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to NRL, and the Bank shall not be released from its liability and obligation under these presents by any exercise by NRL of the liberty with reference to the matters aforesaid, or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of NRL or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would, but for this provision, have the effect of releasing the Bank from its liabilities and obligations under this Guarantee, and the Bank hereby waives all of its rights under any such law.

6. NRL's right to recover the Guarantee Amount from the Bank will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the Contractor and / or that any dispute or disputes are pending before any officer tribunal or court.

7. This Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Bank, NRL or the Contractor.

8. This Guarantee shall be a primary obligation of the Bank and accordingly NRL shall have first and primary recourse to the Bank and shall not be obliged, before enforcing this Guarantee, to take any action in any court or arbitral proceedings against |*insert name of the Bidder),* to make any claim against or issue any notice or demand on *[insert name of the Bidder} or* to exercise, levy or enforce any distress, diligence or other process against *insert name of the Bidders.*

9. Our liability under this Guarantee is restricted to the Guarantee Amount. Our guarantee shall remain in force and be valid until We are liable to pay the Guarantee Amount or any part thereof if you serve upon us a written claim under this Guarantee within 06 (six) months from ……..…… (which is the claim period) after which all your rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities thereunder.

10. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of NRL in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.

11. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred Branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course through post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of NRL that the envelope was so posted shall be conclusive.

Notwithstanding anything contained hereinabove:

(a) the Bank's liability under this Guarantee is restricted to INR [insert];
(b) this Guarantee shall remain in force until [insert];
(c) this Guarantee shall have additional claim period of 06 (six) months thereafter; and
(d) the Bank is liable to pay the Guarantee Amount or any part thereof under this Guarantee only if NRL serves upon the Bank a written claim or demand upon the Bank or any branch thereof on or before the aforesaid claim period.

Signed and sealed this [Date] day of [Month], [Year] at [Place]

SIGNED, SEALED AND DELIVERED For and on behalf of the BANK by:

(Signature) (Name)

(Designation)

(Code Number)

(Address)

NOTES:

(a) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.

(b) The address, telephone number and other details of the Head Office of the Bank as well as of issuing Branch should be mentioned on the covering letter of issuing Branch.

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BANK GUARANTEE FOR EARNEST MONEY DEPOSIT

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 06 (Six) months from the final bid submission date. The bid security is normally to remain valid for a period of 60 (sixty) days beyond the final bid validity period. In case, Contract Performance Security (CPS) is applicable, the successful bidder has to keep his Bid Security, if submitted in the form of a BG, valid till CPS is submitted. The contractor shall be required to suitably extend the period of Bank Guarantee.

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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Proforma for Bank Guarantee for Earnest Money Deposit

(ON NON – JUDICIAL PAPER OF APPROPRIATE VALUE)

Ref…….. Bank Guarantee No…….

To,
Chief General Manager (Commercial)
Numaligarh Refinery Limited,
Pankagrant, PO: Numaligarh Refinery Project,
Dist-Golaghat (Assam), India, PIN-785699

Dear Sir (s)

In accordance with letter inviting Tender under reference No……M/s……having their

Registered / Head office at…….(hereinafter called the Tenderer) wish to participate in the side tender for…….

As an irrevocable bank Guarantee against Earnest Money Deposit for an amount of …….is required to be submitted by the Tenderer as a condition precedent for participation in the said Tender which amount is liable to be forfeited on the happening of any contingencies mentioned in the Tender Document.

We, the……Bank at …….. Having our Head office…… (Local Address) guarantees and undertakes to pay immediately on demand by Numaligarh Refinery Ltd, the amount……..without any reservation, protest, demur and recourse. Any such demand made by Numaligarh Refinery Ltd. shall be conclusive and binding on us irrespective of any dispute or difference raised by the Tendered.

This guarantee shall be irrevocable and shall remain valid up to…… If any further extension of this guarantee is required, the same shall be extended to such required period on receiving instructions from M/s……on whose behalf this guarantee is issued.

In witness where of the Bank, through its authorized officer, has set its hand stamp on this……Day of…….20……at……

WITNESS:
(SIGNATURE NAME)

(OFFICIAL ADDRESS)

(SIGNATURE NAME)
Designation with Bank Stamp
Attorney as per
Power of Attorney No……..
Date……

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FORMAT FOR CORPORATE GUARANTEE

This Corporate Guarantee made on this ____ day of_____month_____year by M/s _____(Parent Company/Group Company/affiliate), a Company organized and existing under the laws of_____and having its registered office at _____(hereinafter referred to as the "Guarantor" which expression shall unless repugnant to the subject or context deemed to include their successors and assignees) at the request and/or behest of_____, a Company organized and existing under the laws of_____having its registered office at_____(hereinafter referred to as "Bidder"), in favour of Engineers India Ltd/_____(insert name of client), a Public Company organized under the laws of India having its Registered office at _____(hereinafter referred to as "Beneficiary").

Whereas:

The Beneficiary floated a public tender dated_____no._____for _____(Purpose).The Bidder has submitted its quotation dated _____and has represented to the Beneficiary that the Bidder is the wholly owned subsidiary/Group Company/affiliate of the Guarantor and that the Bidder has access to and the Guarantor shall make available necessary financial and technical support as required by the Bidder for successful execution of the contract, if awarded to the Bidder, for the Purpose. Accordingly, the Guarantor is ready and willing to give this Corporate Guarantee on the terms and conditions hereinafter contained.

We, the Guarantor are hereby recording the terms and conditions governing our obligations under this Guarantee with the intent of being legally bound by the same and hereby agree, covenant and bind ourselves as follows:-

1. The Guarantor hereby irrevocably and unconditionally guarantees to the Beneficiary, the performance by the Bidder of its obligations under the terms and conditions of the tender and the contract, upon the contract being awarded to them. The Guarantor shall execute such other deeds and documents as may be desired by the Beneficiary in this regard.
2. The Guarantor unconditionally and irrevocably guarantees to the Beneficiary that it will make available or cause to be made available to the Bidder all financial, technical support and expertise, expert manpower and procurement assistance and project management and other resources required to ensure that the Bidder can carry out its obligations as per the tender terms and conditions and that the Bidder at all times fully and effectively discharge its obligations under the terms and conditions of tender, including by discharging the obligations within the time and cost so stipulated.
3. The Guarantor hereby agrees that if the Bidder shall in any respect commit any breach or fails to fulfill any of the terms of the contract/tender or complete it in all respects or if there is a failure to make any supplies or if any material, equipment or machinery under the contract so supplied is not of the required specifications or does not perform as envisaged under the contract, then the Guarantor undertakes to forthwith perform the same and fulfill all the obligations required under tender/contract terms & conditions (including payment of any liquidated damages) on behalf of the Bidder without any extra cost and time implications. The decision of the Beneficiary with respect to breach/failure by the Bidder shall be final and binding on the Guarantor.
4. The Guarantor further undertakes to indemnify and keep harmless the Beneficiary against all losses, damages, expenses, claims, costs (including legal costs and attorney fees) which may be suffered or incurred or threatened to be suffered or incurred by the Beneficiary due to the failure or breach on the part of the Bidder under the contract and/or the Guarantor under this Guarantee.
5. The Guarantor assures and undertakes that during the term of the contract or of any guarantee for performance as per the contract, the Bidder shall continue to be the wholly owned subsidiary/affiliate/group company of the Guarantor and the Guarantor's liability shall not be affected due to any incapacity or lack of power or legal personality or change in the status of the Bidder or the Guarantor.

6. The Guarantor's liabilities under this Guarantee shall not exceed the maximum limit liability (if any) of the Bidder under the tender/contract terms and conditions.

7. The obligation of the Guarantor shall take effect from the date of this Guarantee and shall be independent of any other security given under the contract and remain in full force until all the obligations of the Bidder under the tender/contract have been fully performed and discharged and/or all sums of money payable to Beneficiary have been fully paid.

8. The liabilities of the Guarantor shall not be discharged, diminished or otherwise affected by:-

   a) Any change in the Articles of Association or Bye-Laws or constitution of the Bidder or the Guarantor.

   b) Any amendment to the contract (including any extension of time) or any waiver granted to the Bidder.

   c) The dissolution, amalgamation, reconstruction or reorganization of the Bidder or the Guarantor.

9. NOTICE:

   Any notice, demand, declaration or other communication to be given by the Beneficiary or the Guarantor to the other shall be in writing, in English language and delivered in person or by Air Mail or by Courier Services or by Facsimile or by E-Mail to the address given below and shall be deemed to be validly served after two days from the date thereof:-

   For Guarantor
   Attention of
   Mailing Address
   Email Address
   Fax No.

   For Beneficiary
   Attention of
   Mailing Address
   Email Address
   Fax No.

10. No modification, alteration or amendment of this Guarantee or any of its terms or provisions shall be valid or legally binding unless the Beneficiary consents to the same in writing.

11. No failure to take any action with respect to a breach of this Guarantee or a default by any other party shall constitute a waiver of the Beneficiary's right to enforce any provision of this Guarantee or to take action with respect to such breach or default or any subsequent breach or default.

12. The Guarantor confirms that it has all the necessary powers and corporate authority to issue this Guarantee in favour of the Beneficiary and this Guarantee constitutes a valid legal and enforceable document under the law to which it is subject. The undersigned has full power to issue this Guarantee under the power of Attorney /Resolution of Board of Directors Dated---------- granted to him by the Guarantor.

13. GOVERNING LAW AND JURISDICTION: This Guarantee shall be exclusively governed by and construed in accordance with the laws of India without giving effect to the principles of conflict of laws therein. No party shall take a plea that any forum is inconvenient.

14. DISPUTE RESOLUTION: Any dispute arising out of or in relation to this Guarantee shall be resolved by arbitration as per the provision set out in the tender document.

IN WITNESS WHEREOF the Guarantor has duly executed this Guarantee as at the date first above written.

For and on behalf of Guarantor,

_____

(Signature)Name :
Corporate Seal / Designation :
Date:

Witness
Signature :

PROFORMA FOR SURETY BOND FOR BID SECURITY / EARNEST MONEY DEPOSIT

(***To be executed on non-judicial stamp paper of appropriate value***)

Ref…… Surety Bond No…….

To,

Chief General Manager (Commercial)
Numaligarh Refinery Limited,
Pankagrant, PO: Numaligarh Refinery Project,
Dist-Golaghat (Assam), India, PIN-785699

Dear Sir (s)

In consideration of you, Numaligarh Refinery Limited, having its office at [122A, G.S. Road, Christianbasti Guwahati-781005] (hereinafter referred to as the "**NRL**", which expression shall unless it be repugnant to the subject or context thereof include its, successors and assigns) having agreed to receive the Bid of [***insert name of the Bidder***] having its registered office at [***insert address of the Bidder***] (hereinafter referred to as the "**Bidder**" which expression shall unless it be repugnant to the subject or context thereof include its/their executors, administrators, successors and assigns) in relation to [***insert Tender Name***] pursuant to Bidding Documents bearing Reference Number [***insert Tender number***] (hereinafter collectively referred to as "**Bidding Documents**"), we [***insert name of the insurer***] having our registered office at [***insert registered address of the insurer***] and one of its branches at [***insert relevant branch address of the insurer***] (hereinafter referred to as the "**Surety Insurer**" which expression shall include its successors and assigns), at the request of the Bidder, do hereby in terms of the Bidding Documents, irrevocably, unconditionally and without reservation guarantee the due and faithful fulfilment and compliance of the terms and conditions of the Bidding Documents by the said Bidder and unconditionally and irrevocably undertake to pay NRL forthwith on first demand without any demur, reservation, recourse, contest, protest or proof or satisfaction or condition and without reference to the Bidder, an amount of Rs. [***insert amount***] (hereinafter referred to as the "**Surety Bond**") as and by way of [Bid Security/ EMD] as our primary obligation if the Bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said Bidding Documents.

NOW, THEREFORE, the Surety Insurer hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. This Surety Bond shall be a continuing guarantee and shall remain in full force and effect for all claims or demands made by the NRL on the Surety Insurer until the NRL discharges this Surety Bond subject, however, that the NRL shall have no claims under this Surety Bond after [***insert time and date including at least eight months from the final bid submission date, plus three months' claim period***] or any written extension(s) thereof.

2. In order to give full effect to this Surety Bond, NRL shall be entitled to treat the Surety Insurer as the principal debtor. NRL shall have the fullest liberty without affecting in any way the liability of the Surety Insurer under this Surety Bond from time to time to vary any of the terms and conditions contained in the said Bidding Documents or to extend time for submission of the Bids or the Bid validity period or the period for conveying acknowledgement of Letter of Acceptance by the Bidder or the period for fulfilment and compliance with all or any of the terms and conditions contained in the said Bidding Documents by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Documents or the securities available to NRL, and the Surety Insurer shall not be released from its liability under these presents by any exercise by NRL of the liberty with reference

to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of NRL or any indulgence by NRL to the said Bidder or by any change in the constitution of NRL or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Surety Insurer from its such liability.

3. It shall not be necessary for the NRL to proceed against the Bidder before proceeding against the Surety Insurer and the Surety Bond herein contained shall be enforceable against the Surety Insurer as principal debtor notwithstanding the existence of any other undertaking or security for any indebtedness of the Bidder to the NRL and notwithstanding that any such security shall at the time when claim is made against the Surety Insurer or proceedings taken against the Surety Insurer hereunder, be outstanding or unrealized.

4. The amount stated by the NRL in any demand, claim or notice made with reference to this Surety Bond shall as between the Surety Insurer and the NRL for the purpose of this Surety Bond be final, conclusive and binding of the amount payable by the Surety Insurer to the NRL hereunder.

5. The liability of the Surety Insurer to the NRL under this Surety Bond shall remain in full force and effect notwithstanding the existence of any difference or dispute between the Bidder and the NRL, the Bidder and the Surety Insurer and/or the Surety Insurer and the NRL or otherwise howsoever related to this Surety Bond or the liability of the Bidder to the NRL, and notwithstanding the existence of any instructions or purported instructions by the Bidder or any other person to the Surety Insurer not to pay or for any cause withhold or defer payment to the NRL under this Surety Bond, with the intent that notwithstanding the existing of such difference, dispute or instructions, the Surety Insurer shall be and remain liable to make payment to the NRL in terms thereof.

6. We, the Surety Insurer, further agree that NRL shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents including, inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said Bidding Documents, and the decision of NRL that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between NRL and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator or any other authority.

7. This Surety Bond shall not be determined or affected by the liquidation or winding up or dissolution or change of constitution or insolvency of the Bidder or any change in the legal constitution of the Surety Insurer or the NRL.

8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Surety Insurer and sent by courier or by registered mail or via email to the Surety Insurer at the address set forth herein.

9. We undertake to make the payment on receipt of your notice of claim on us, addressed to name of Surety Insurer *along with branch address* and delivered at our above branch and/or via email to: [***insert email ID***] which shall be deemed to have been duly authorized to receive the said notice of claim.

10. We, the Surety Insurer, further undertake not to revoke this Surety Bond during its currency except with the previous express consent of NRL in writing.

11. The Surety Insurer declares that it has power to issue this Surety Bond and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Surety Bond for and on behalf of the Surety Insurer.

12. This Surety Bond issued by the us is in full compliance with applicable laws including the guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI), as amended from time to time.

13. This Surety Bond is for the benefit of NRL and its successors and assigns. This Surety Bond is binding not only on the Surety Insurer, but also on the Surety Insurer's successors and permitted assigns. The Surety Insurer shall not assign its rights and obligations hereunder to any person, insurer, company or other entity except as permitted by NRL in writing.

14. Notwithstanding anything contained herein: (i) The Surety Insurer's liability under this Surety Bond shall not exceed [***insert amount of Bid Security/ EMD***]; (ii) This Surety Bond shall remain in force until [***insert***]; (iii) this Surety Bond shall have additional claim period of [***three***] months thereafter; and (iv) the Surety Insurer is liable to pay the Surety Bond amount or any part thereof under this Surety Bond only if NRL serves upon the Surety Insurer a written claim or demand upon the Surety Insurer or any branch thereof on or before the aforesaid claim period.

Signed and sealed this [●] day of [●], [●] at [●].

SIGNED, SEALED AND DELIVERED

For and on behalf of the Surety Insurer by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

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Instructions: -

(a) The surety bond shall be from a Surety Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI) as amended from time to time.
(b) The surety bond should contain the name, designation and code number of the officer(s) signing the surety bond.
(c) The address, telephone number, E-mail and other details of the head office of the surety insurer as well as of issuing branch should be mentioned on the covering letter of issuing branch. The letter may also include any web portal link, from where the Surety Bond can be confirmed by the Company.
(d) The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Insurer issuing the Insurance Surety Bond.

PROFORMA OF SURETY BOND FOR CONTRACT PERFORMANCE SECURITY

(To be executed on non-judicial stamp paper of appropriate value)

Ref..... Guarantee No.....

To,

Chief General Manager (Commercial)

Numaligarh Refinery Limited,

Pankagrant, PO: Numaligarh Refinery Project,

Dist-Golaghat (Assam), India, PIN-785699

Dear Sir (s),

In consideration of you, Numaligarh Refinery Limited, having its office at [122A, G.S. Road, Christianbasti Guwahati-781005] (hereinafter referred to as the "**NRL**", which expression shall unless it be repugnant to the subject or context thereof include its successors and assigns) having awarded the Contract to [***insert name of the Contractor***] having its registered office at [***insert address of the Contractor***] (hereinafter referred to as the "**Contractor**", which expression shall unless it be repugnant to the subject or context thereof include its/their executors, administrators, successors and assigns) in relation to [***insert Contract Name/Work Description***] pursuant to the Contract Agreement bearing Reference Number [***insert reference number***] (hereinafter collectively referred to as "**Contract Documents**"), we [***insert name of the Guarantor***] having our registered office at [***insert registered address of the Guarantor***] and one of its branches at [***insert relevant branch address of the Guarantor***] (hereinafter referred to as the "**Guarantor**", which expression shall include its successors and assigns), at the request of the Contractor, do hereby irrevocably, unconditionally, and without reservation guarantee the due and faithful performance, discharge, and compliance of all terms, conditions, and obligations under the Contract Documents by the said Contractor and unconditionally undertake to pay NRL forthwith on first demand without any demur, reservation, recourse, contest, protest, or proof of satisfaction or condition, and without reference to the Contractor, an amount of Rs. [***insert amount***] (hereinafter referred to as the "**Guarantee Amount**") as our primary obligation if the Contractor shall fail to perform, discharge, or comply with any of the terms, conditions, or obligations contained in the said Contract Documents.

NOW, THEREFORE, the Guarantor hereby unconditionally and irrevocably guarantees and affirms as follows:

1. This Performance Guarantee (hereinafter referred to as the "**Guarantee**") shall be a continuing guarantee and shall remain in full force and effect for all claims or demands made by the NRL on the Guarantor until the NRL discharges this Guarantee, subject however that the NRL shall have no claims under this Guarantee after [***insert time and date including at least 03 (three) months beyond the defect liability period, plus six months' claim period***] or any written extension(s) thereof.

2. In order to give full effect to this Guarantee, NRL shall be entitled to treat the Guarantor as the principal debtor. NRL shall have the fullest liberty without affecting in any way the liability of the Guarantor under this Guarantee from time to time to vary any of the terms and conditions contained in the said Contract Documents or to extend time for performance of the Contract or the validity period of the Performance Guarantee or the period for compliance with any obligations by the Contractor or to postpone for any

time and from time to time any of the powers exercisable by it against the said Contractor and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Contract Documents or the securities available to NRL, and the Guarantor shall not be released from its liability under these presents by any exercise by NRL of the liberty with reference to the matters aforesaid or by reason of time being given to the said Contractor or any other forbearance, act or omission on the part of NRL or any indulgence by NRL to the said Contractor or by any change in the constitution of NRL or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to Guarantee would but for this provision have the effect of releasing the Guarantor from its such liability.

3. It shall not be necessary for the NRL to proceed against the Contractor before proceeding against the Guarantor and the Guarantee herein contained shall be enforceable against the Guarantor as principal debtor notwithstanding the existence of any other undertaking or security for any indebtedness of the Contractor to the NRL and notwithstanding that any such security shall at the time when claim is made against the Guarantor or proceedings taken against the Guarantor hereunder, be outstanding or unrealized.

4. The amount stated by the NRL in any demand, claim or notice made with reference to this Guarantee shall as between the Guarantor and the NRL for the purpose of this Guarantee be final, conclusive and binding of the amount payable by the Guarantor to the NRL hereunder.

5. The liability of the Guarantor to the NRL under this Guarantee shall remain in full force and effect notwithstanding the existence of any difference or dispute between the Contractor and the NRL, the Contractor and the Guarantor and/or the Guarantor and the NRL or otherwise howsoever related to this Guarantee or the liability of the Contractor to the NRL, and notwithstanding the existence of any instructions or purported instructions by the Contractor or any other person to the Guarantor not to pay or for any cause withhold or defer payment to the NRL under this Guarantee, with the intent that notwithstanding the existing of such difference, dispute or instructions, the Guarantor shall be and remain liable to make payment to the NRL in terms thereof.

6. We, the Guarantor, further agree that NRL shall be the sole judge to decide as to whether the Contractor is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the aforesaid Contract Documents and the decision of NRL that the Contractor is in default as aforesaid shall be final and binding on us, notwithstanding any differences between NRL and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority.

7. This Guarantee shall not be determined or affected by the liquidation or winding up or dissolution or change of constitution or insolvency of the Contractor or any change in the legal constitution of the Guarantor or the NRL.

8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Guarantor and sent by courier or by registered mail or via email to the Guarantor at the address set forth herein.

9. We undertake to make the payment on receipt of your notice of claim on us addressed to name of Guarantor along with branch address and delivered at our above branch and/or via email to: [***insert email ID***] which shall be deemed to have been duly authorized to receive the said notice of claim.

10. We, the Guarantor, further undertake not to revoke this Guarantee during its currency except with the previous express consent of NRL in writing.

11. The Guarantor declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Guarantee for and on behalf of the Guarantor.

12. This Guarantee issued by us is in full compliance with applicable laws of India, as amended from time to time.

13. This Guarantee is for the benefit of NRL and its successors and assigns. This Guarantee is binding not only on the Guarantor, but also on the Guarantor's successors and permitted assigns. The Guarantor shall not assign its rights and obligations hereunder to any person, insurer, company or other entity except as permitted by NRL in writing.

14. Notwithstanding anything herein:
    i. The Guarantor's liability under this Guarantee shall not exceed Rs. [***insert Guarantee Amount***];
    ii. This Guarantee shall remain in force until [***insert***];
    iii. This Guarantee shall have additional claim period of [***six***] months thereafter; and
    iv. The Guarantor is liable to pay the Guarantee Amount or any part thereof under this Guarantee only if NRL serves upon the Guarantor a written claim or demand upon the Guarantor or any branch thereof on or before the aforesaid claim period.

Signed and sealed this [●] day of [●], [●] at [●].

SIGNED, SEALED, AND DELIVERED

For and on behalf of the Guarantor by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

----------o----------o----------o----------o----------

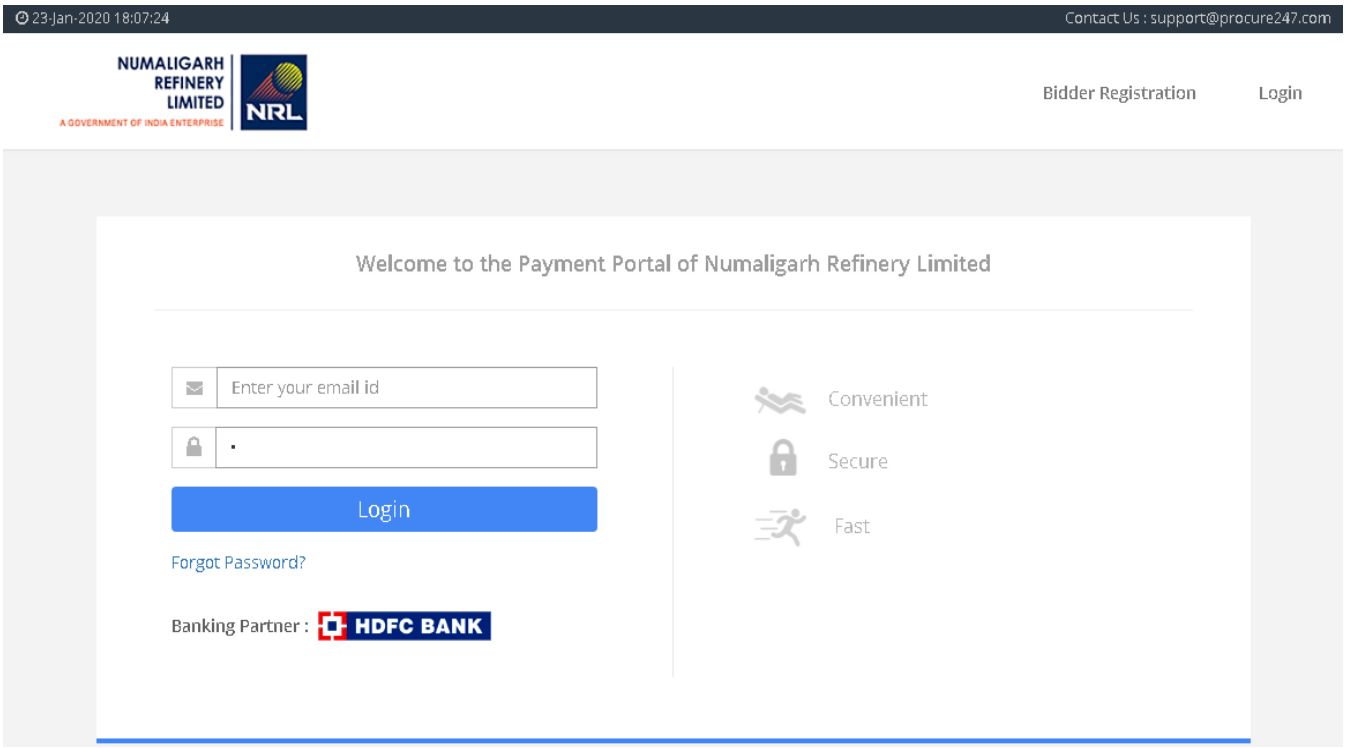
Instructions: -

(a) The surety bond shall be from a Surety Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI) as amended from time to time.
(b) The surety bond should contain the name, designation and code number of the officer(s) signing the surety bond.
(c) The address, telephone number, E-mail and other details of the head office of the surety insurer as well as of issuing branch should be mentioned on the covering letter of issuing branch. The letter may also include any web portal link, from where the Surety Bond can be confirmed by the Company.
(d) The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Insurer issuing the Insurance Surety Bond.

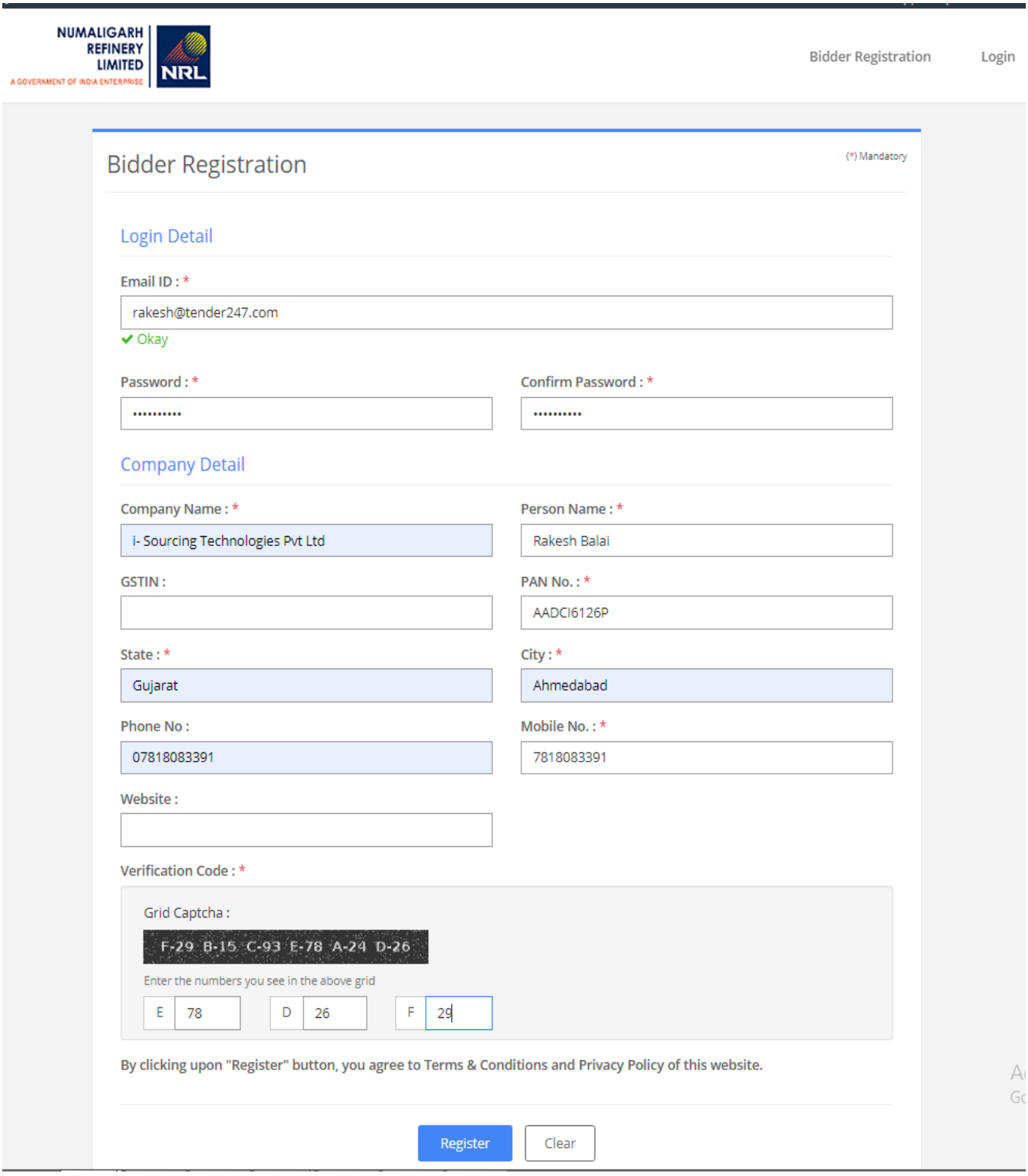
Bidder Side Manual

Numaligarh Refinery Limited

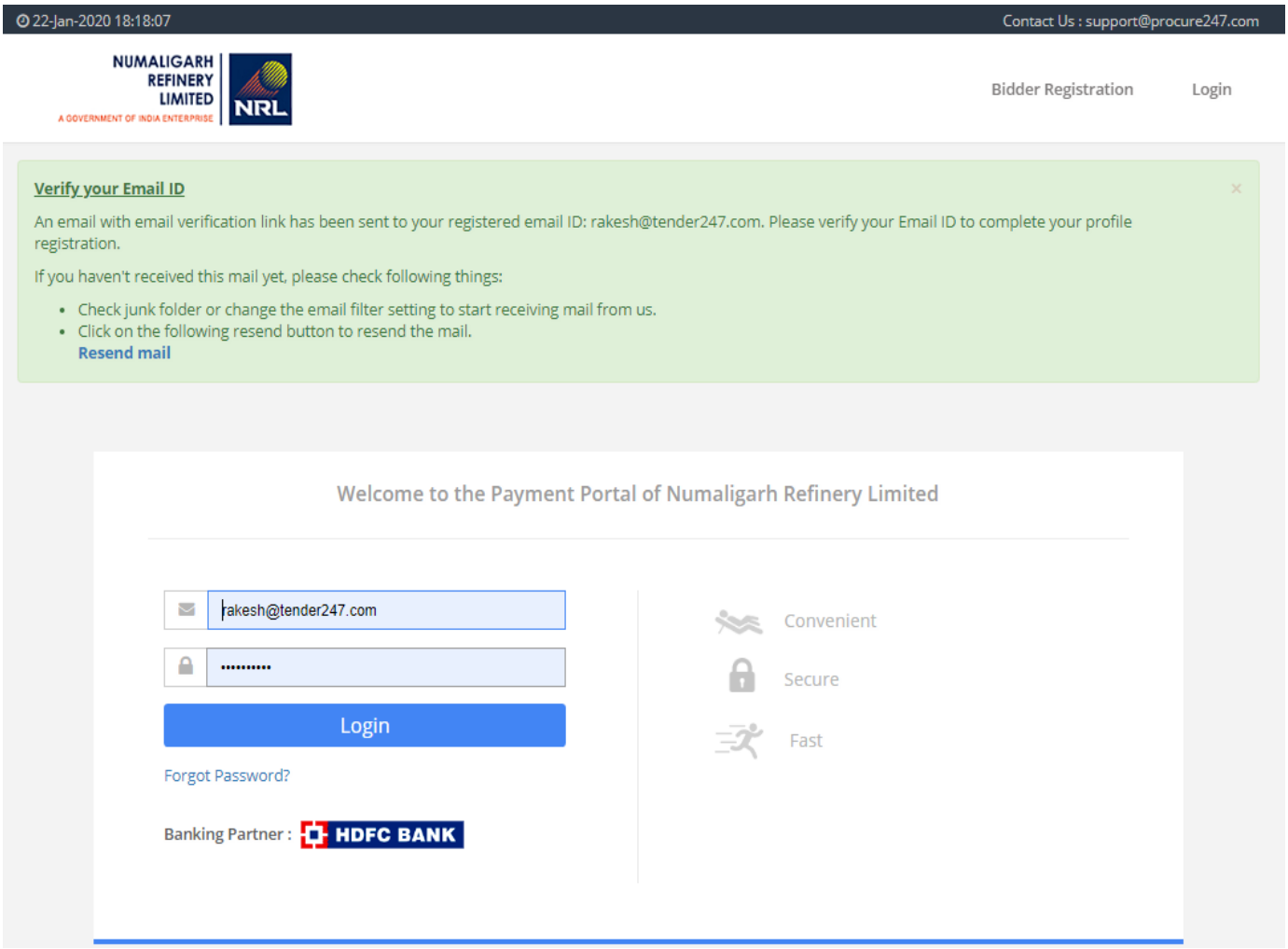
URL: https://nrl.procure247.com/TenderPay



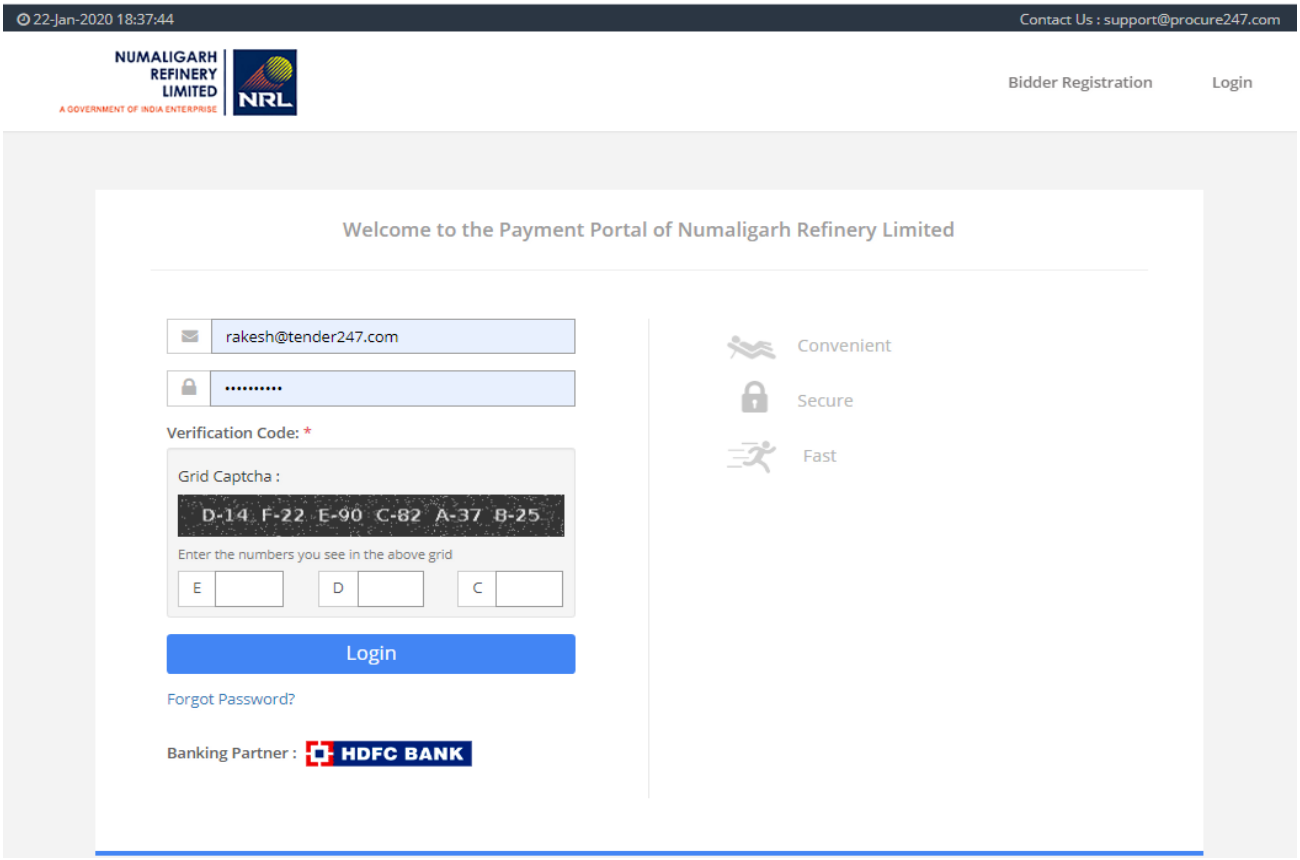
Bidder Registration Screen – Fill the mandatory details required and complete the process.



On successful submission of details in bidder registration form, bidder will get the system generated link to verify his/her email id and login to the website. Without verifying email id bidder may not be able to login to the system.

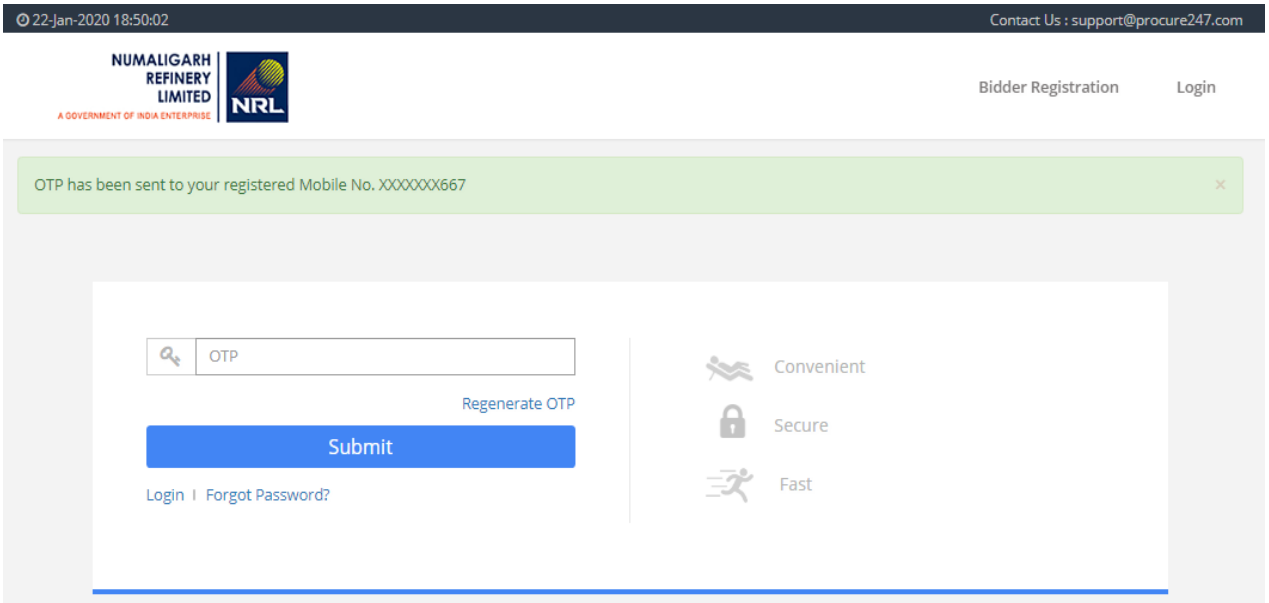


After successful email verification – please login with your user id and password



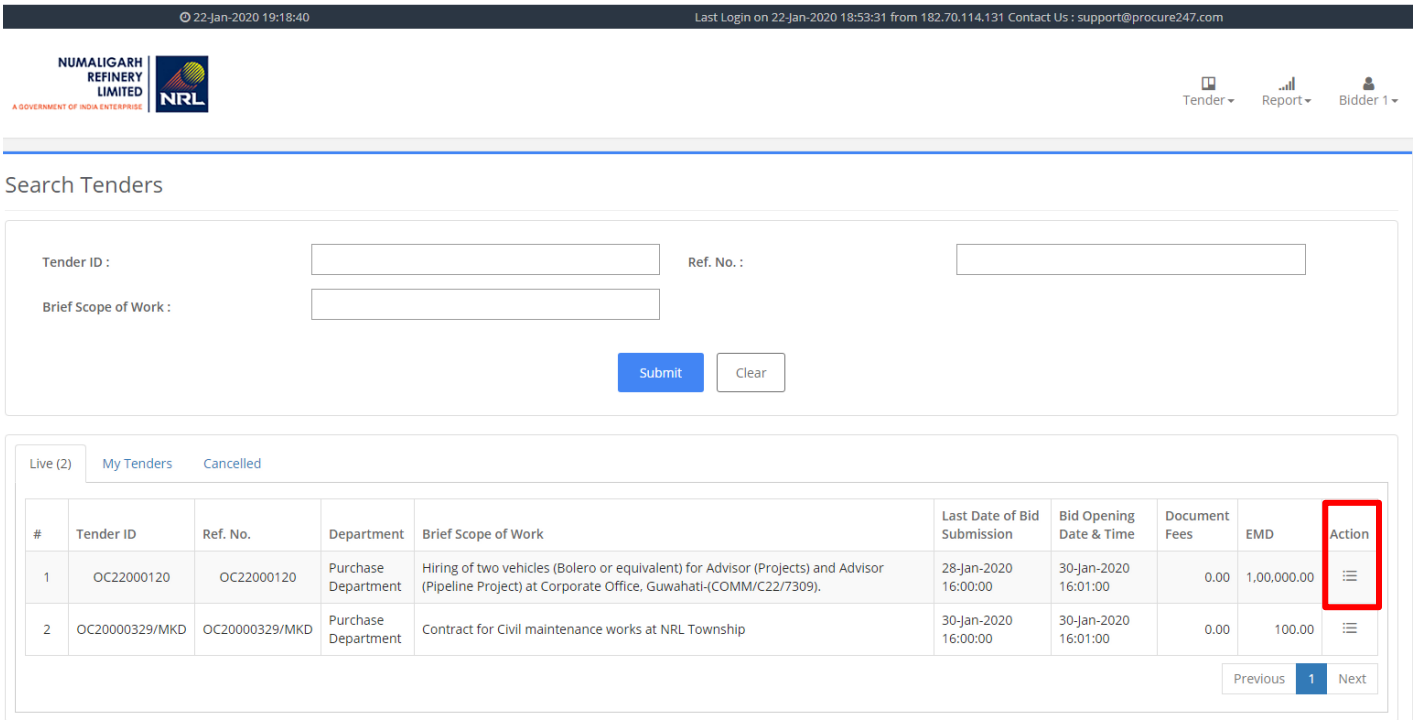
Bidder will receive system generate One Time Password (OTP) on their registered mobile number.

In case not receiving of OTP please click Regenerate OTP and login.



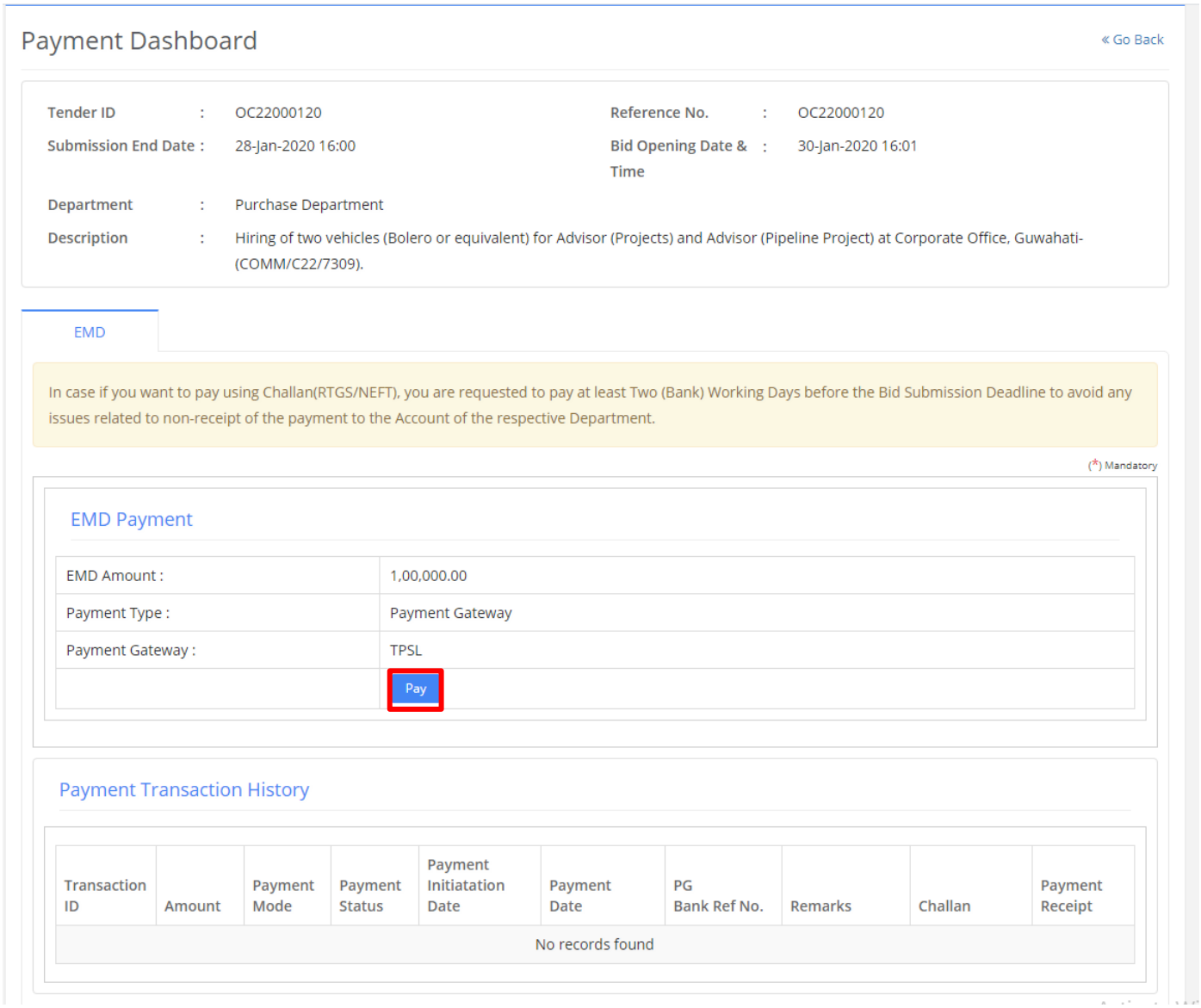
After login Screen to the bidder

Bidder can search the tenders and proceed for EMD payment.

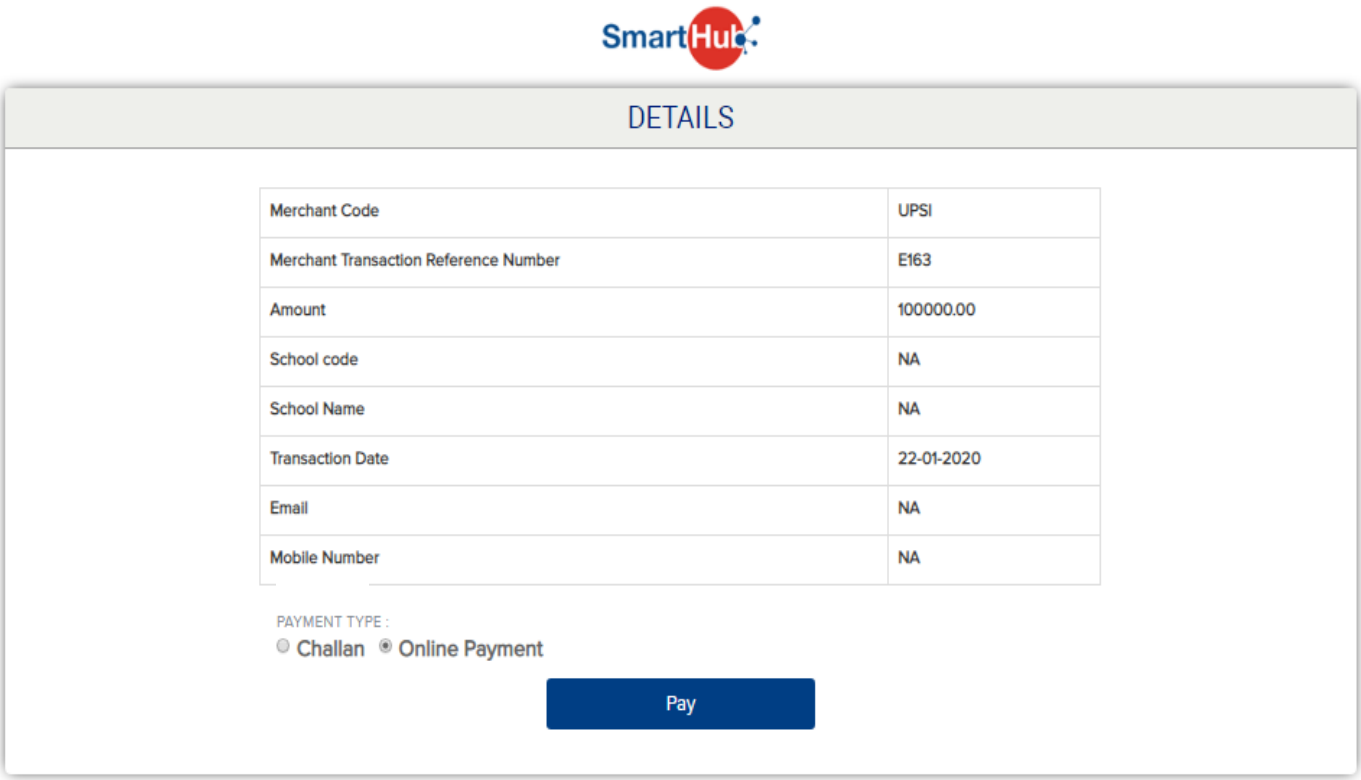


Bidders' have to click on Payment Dashboard option available under Action tab – which can be seen in above screen.

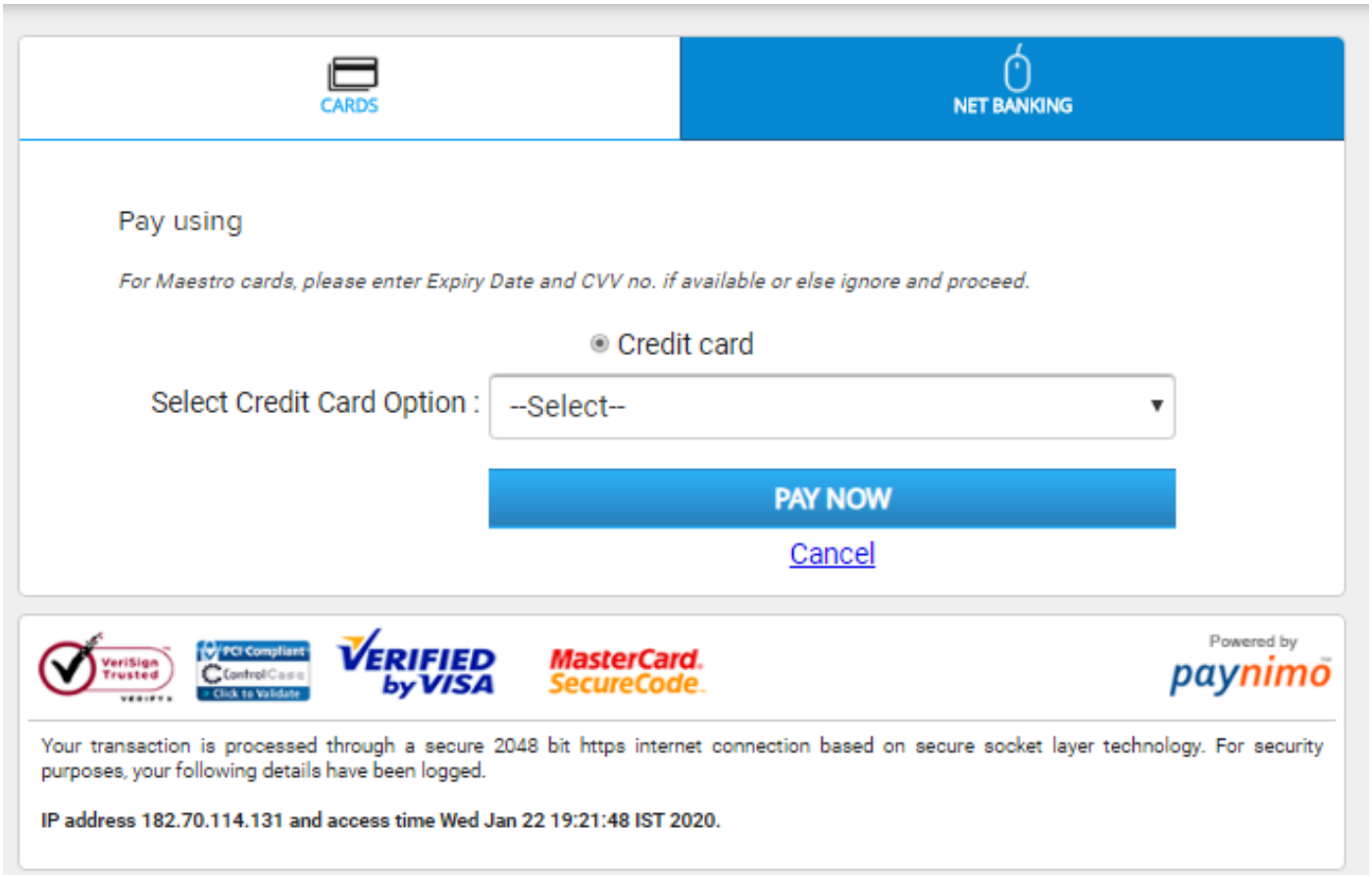
Payment Dashboard – Click on Pay to proceed further for the selection of payment mode.



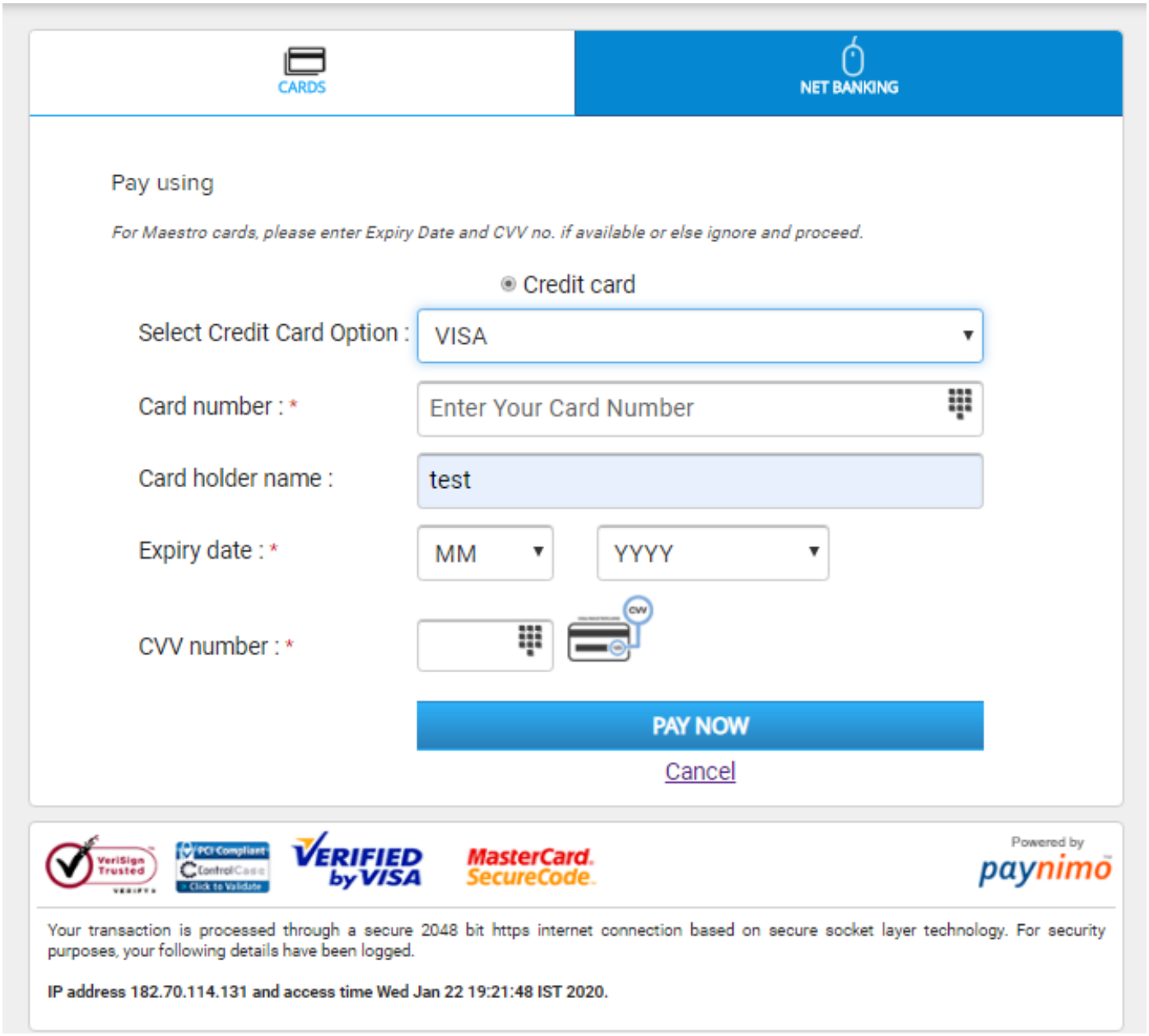
Smart Hub – Bidders' can select the online payment and click on Pay to proceed further.



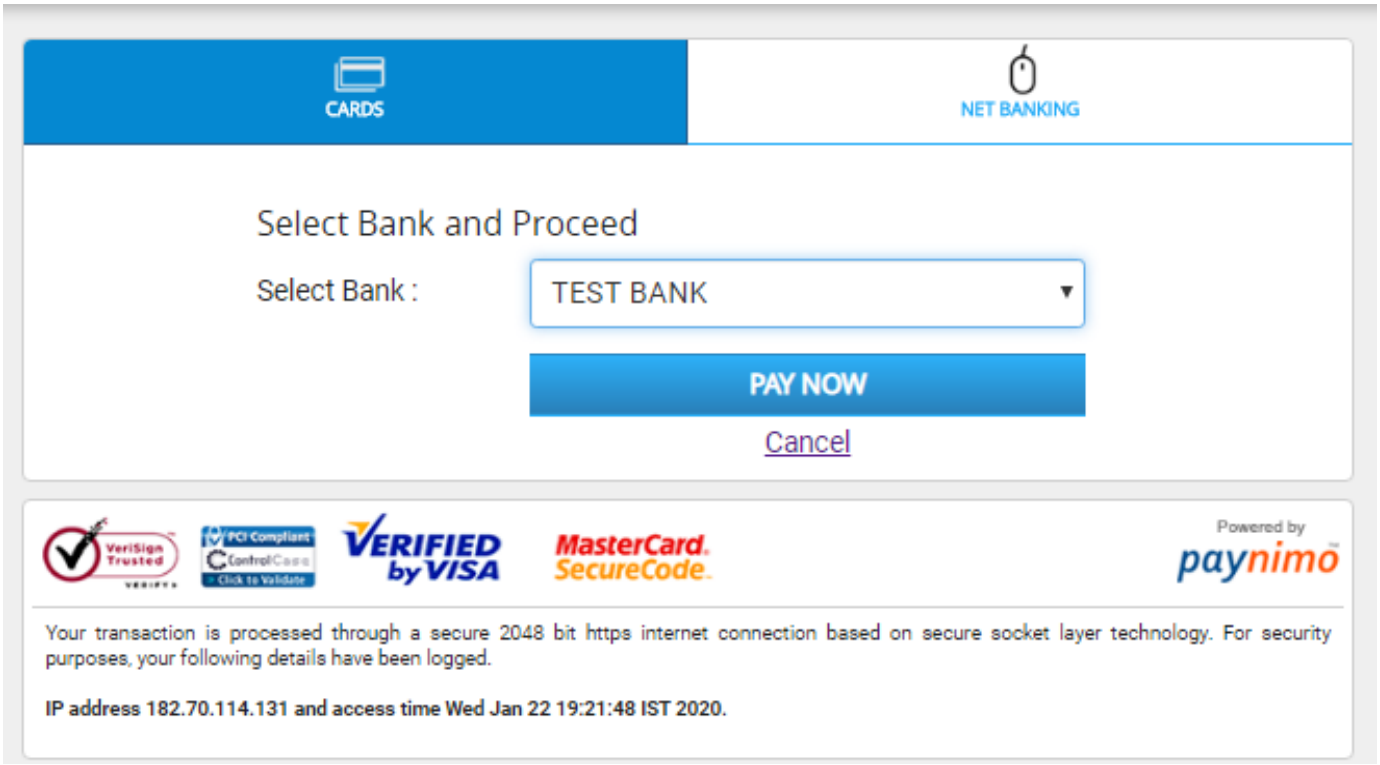
After click on Pay – Bidder will get an option for Cards and Net Banking. Bidders can select their preference and proceed further for the payment.



Payment through cards.



Payment through Net Banking – Bidders can select their Bank from available options and click to Pay Now.

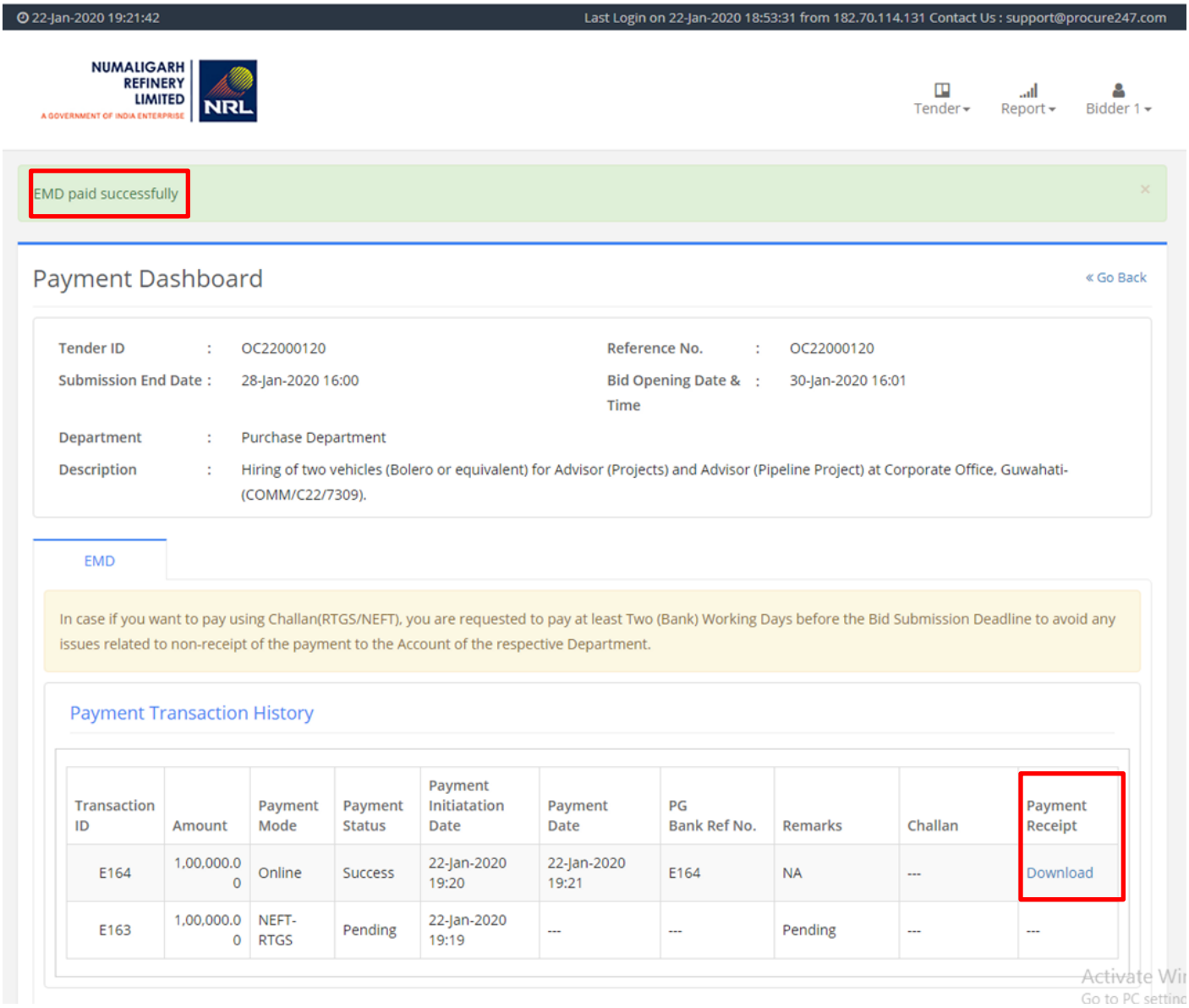


After selecting of Bank – Bidders need to enter their customer ID and Password and click to submit to process payment.

Payment Confirmation page – after entering customer id and password, bidders can view the amount they would like to pay and click submit to proceed further.

On successful payment bidder will receive system generated message on screen stating “EMD paid successfully” and the same is highlighted in below mentioned screen.

Bidders’ can also download the Payment receipt from this page which is also highlighted in below mentioned screen.



Downloaded payment receipt – Bidders' can easily print the receipt and use it for their bidding purpose.

Procure24x7

Payment Receipt

Transaction ID:	E164
Tender ID:	OC22000120
Reference No.:	OC22000120
Organisation:	Numaligarh Refinery Limited
Department:	Purchase Department
Brief Scope of Work:	Hiring of two vehicles (Bolero or equivalent) for Advisor (Projects) and Advisor (Pipeline Project) at Corporate Office, Guwahati-(COMM/C22/7309).
Company name:	Bidder 1 Pvt Ltd
Bid Submission End Date:	28-Jan-2020 16:00
PG Bank Ref No.:	E164
Payment Mode:	Online
Payment For:	EMD Payment
EMD Fees:	100,000.00/-
Payment Date & Time:	22-Jan-2020 19:21
Payment Status:	Successful

Instructions to Bidders for e-Tendering

[APPENDIX-VII TO INSTRUCTIONS TO BIDDER]

1.0 INSTRUCTIONS TO BIDDERS FOR E-TENDERING

The bidders are required to submit soft copies of their bids electronically on the CPP Portal (URL: http://eprocure.gov.in) only, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

Various links such as "Help for Contractor", "Information about DSC", "FAQ", "Resources Required", "Bidders Manual Kit" etc. are available on home page of http://eprocure.gov.in/eprocure/app facilitating vendors to participate in the bidding process. Bidder are advised to download & utilize the available information/documents under these links for activities like Registration in CPPP, obtaining User ID & Password, uploading & submission of e-bids etc. Bidders are advised in their own interest to carefully go through Instructions for E-tendering and other related document available against various help links so as to ensure that bids are uploaded in E-tendering website well before the closing date and time of bid submission.

More detailed information useful for submitting online bids on the CPP Portal may be obtained at: https://eprocure.gov.in/eprocure/app.

2.0 REGISTRATION

2.1 Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Click **here to Enroll**" on the CPP Portal is free of charge.

2.2 As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

2.3 Bidders are advised to register their valid email address and mobile numbers as part of the registration process and submit in EIL tender portal for updation of records (http://tenders.eil.co.in) . These details would be used for any communication from the CPP Portal.

2.4 Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (DSC) (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.

2.5 Foreign Bidders have to refer "DSC details for foreign Bidders" for Digital signature Certificates requirements which comes under Download Tab at https://eprocure.gov.in/eprocure/app and the remaining part is same as above and below.

2.6 Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

2.7 Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

3.0 SEARCHING FOR TENDER DOCUMENTS

3.1 There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.

3.2 Once the bidders have selected the tenders they are interested in, the same can be moved to the respective „My Tenders" folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

3.3 The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

4.0 PREPARATION OF BIDS

4.1 Bidder should take into account any corrigendum published on the tender document before submitting their bids.

4.2 Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

4.3 To avoid Network congestion, Bidder is recommended to upload file size of up to Maximum 35 MB per part. However, in case file size exceeds 35 MB, bidder may compress the files by scanning with 75 dpi setting as per s.no 4 below and can use additional 25 MB space ("My Documents") provided to the bidder as per s.no 5 below.

4.4 Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option. However, Price Schedule / SOR shall be strictly in RAR format without altering any contents of the formats uploaded by EIL in their Bidding Document.

4.5 To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

5.0 SUBMISSION OF BIDS

5.1 Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

5.2 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

5.3 Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.

5.4 Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the Tender Processing Section, within the final bid due date & time. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.

5.5 A Price Bid format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the Price Bid file, open it and complete the cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the Price Bid file is found to be modified by the bidder, the bid will be rejected.

5.6 The server time (which is displayed on the bidders‟ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

5.7 All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.

5.8 The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

5.9 Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

5.10 The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

6.0 RETENDER

6.1 Please note that if Tender has been retendered, than it is mandatory for the bidder to submit their offer again on CPP Portal.

7.0 WITHDRAWAL OF BID

7.1 It may please be noted that bidders now have an additional feature of withdrawing their bids before due date and time. After submitting the bid on the CPP Portal, if the bidder wishes to withdraw his bid, he can do so. However, if the bidder withdraws his bid, he will be exempted from further participation in the tender and won‟t be able to submit his bid again for that particular tender.

8.0 ASSISTANCE TO BIDDERS

8.1 Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the

relevant contact person indicated in the tender.

8.2 Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 233 7315.

APPENDIX-VIII TO ITB

COMMERCIAL LOADING OF OFFERS IN CASE OF DEVIATIONS

NOT APPLICABLE

Numaligarh Refinery Limited

Commercial Department

[Revised policy effective from 26.05.2025]

Policy for Holiday listing/ Banning/ Debarring of Contractors/ Suppliers

Introduction:

Agencies engaged in the course of various contracts for goods, works and services are expected to adopt ethics of the highest standard and maintain a very high degree of integrity, transparency, commitments and sincerity towards the contracts undertaken. However, on occasions the terms are found to be infringed and deviations from expected behavior are observed. It is not in the interest of NRL to deal with agencies who commit negligence, deception, fraud or other misconduct in the tendering and execution process. To deal with such situations, this policy for Holiday listing/ Banning/ Debarring of Contractors/ Suppliers has been formulated as below.

NRL had adopted holiday listing policy since inception. Last update of the policy was undertaken on 07.11.2022. The present revision is being undertaken taking cognizance of practice followed by peer industries.

Revised Policy for holiday listing/ banning/ debarring of contractors/ suppliers shall be applicable to all tenders floated by NRL w.e.f. the date of this policy including tenders floated through GeM portal. However, the application of this policy in GeM tenders shall be in conjunction with the latest Incident Management Policy of GeM (i.e., suspension/debarment by GeM will automatically debar such bidder from the tender process, without requiring further debarment proceedings by NRL).

Cases wherein a show cause notice has been served under NRL's policy for holiday listing/ banning/ debarring of contractors/ suppliers, policy prevailing on the date of issue of the show-cause notice, shall be applicable.

For updated holiday listing policy, the NRL website www.nrl.co.in shall be referred. [www.nrl.co.in → Tenders → Download Manuals → Holiday Listing Policy]

1. Definitions:

In these Guidelines, unless the context otherwise requires

(i) The terms "Holiday listing", "Banning of firm", "Suspension", "Black-Listing", "Debarment" etc. shall convey the same meaning, i.e., debarment from participating / consideration in any procurement process undertaken by NRL. This definition shall have an overriding effect on any other definition of any of the afore-mentioned terms / phrases in any other policy / document of NRL issued prior to this policy.

(ii) Agency: A "Party/ Contractor/ Supplier/ Vendor/ Consultant/ Bidder/ Licensor/ NRL approved Sub-Vendor, Sub-Contractor, Sub-Consultant" referred to by whatsoever name in any contract, in the context of this Policy shall mean an 'Agency' and shall mean and include a public limited company or a private limited company, a joint venture, Consortium, HUF, a Firm whether registered or not, an individual, co-operative society or an association or a group of persons engaged in any commerce, trade, industry etc.

Firm: The term 'Firm' or 'Bidder" has the same meaning for the purpose of these Guidelines, which includes an individual or person, a company, a cooperative society, a Hindu undivided family, a limited liability partnership, joint venture, consortium and an association or body of persons, whether incorporated or not, engaged in trade or business.

Allied firm: All concerns which come within the sphere of effective influence of a debarred Firm shall be treated as Allied Firms. In determining this, the following factors may be taken into consideration:

a. Whether the management is common;
b. Majority interest in the management is held by the partners or directors of banned/ suspended firm;

c. Substantial or majority shares are owned by the banned/ suspended firm and by virtue of this it has a controlling voice;
d. Directly or indirectly controls, or is controlled by or is under common control with another bidder;
e. All successor firms will also be considered as allied firms.

(iii) Appellate Authority: "Appellate Authority" shall mean the Managing Director, NRL. The Appellate authority shall be higher than the "Competent Authority".

(iv) Competent Authority: ''Competent Authority" shall mean the authority, who is competent to take final decision for Holiday listing/ Banning/ Debarring of Contractors/ Suppliers as per provision of DOA (Delegation of Authority).

(v) Corrupt Practice: "Corrupt Practice" means the offering, giving, receiving or soliciting, directly or indirectly, anything of value done to improperly influence the actions in selection process or in contract execution. Corrupt Practice" also includes any omission for misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.

(vi) Fraudulent Practice: "Fraudulent Practice" means and include any act or omission committed by an Agency or with his connivance or by his agent by misrepresenting/ submitting false documents and/ or false information or concealment of facts or to deceive in order to influence a selection process or during execution of contract/order.

(vii) Collusive Practice: "Collusive practice amongst bidders (prior to and/or after bid submission)" means a scheme or arrangement designed to establish bid prices at artificial non-competitive levels and to deprive NRL of the benefits of free and open competition.

(viii) Coercive Practice: "Coercive practice" means impairing or harming or threatening to impair or harm directly or indirectly, any agency or its property to influence the improperly actions of an agency, obstruction of any investigation or auditing of a procurement process.

(ix) Officer-in-Charge: "Officer-in-Charge (OIC)" or "Engineer-in-Charge (EIC)" shall mean the person(s) designated to act for and on behalf of NRL for the execution of the work as per requirement of the concerned department.

(x) Malpractice: Malpractice means any Corrupt Practice. Fraudulent Practice, Collusive Practice or Coercive practice as defined herein.

(xi) Mis-Conduct: "Mis-conduct' means any act or omission by an Agency, making it liable for action for Holiday Listing as per these guidelines.

(xii) Nodal Department: "Nodal Department" means the Department primarily assigned with the roIe of overseeing the Holiday Listing Process to ensure adherence to guidelines, maintaining, updating and publishing the list of Agencies with whom NRL has decided to ban business dealings and shall mean the Commercial Department.

2. Reasons for Holiday Listing:

An agency may be placed in Holiday List for any one or more of the following circumstances:

2.1 If the Agency, in the context of its dealings with NRL:

a) Has breached the Code of Integrity for Public Procurement (CIPP).
b) Has indulged in malpractices.
c) Has submitted fake, false or forged documents / certificates.
d) Has substituted materials in lieu of materials supplied by NRL or has not returned or has unauthorized disposed off materials / documents / drawings / tools or plants or equipment supplied by NRL.
e) Has deliberately violated and circumvented the provisions of labour laws/ regulations / rules, safety norms, environmental norms or other 'statutory' requirements.

f) Has deliberately indulged in construction and erection of defective works or supply of defective materials.
g) Has not cleared previous dues to NRL if applicable.
h) Has committed breach of contract or has abandoned the contract.
i) Poor performance of the Agency in one or several contracts / Failing to meet planned schedule in contracts specified to be for Refinery Turn Around (RTA) or Emergency Shutdown or for Onsite/Offsite Emergency / Supply of sub-standard materials / substandard quality of works / Performance of the contractor declared as Unsatisfactory on the basis of NRL's "Contractors' Performance Evaluation Procedure".
j) Has not honoured the fax of award/ letter of award/ Contract/ Purchase Order/ after the same is issued by NRL or fails to provide the security as may be required for the performance of the contract within 30 days from LOA (unless further extended by NRL) or is found to have neglected / abandoned the Order / LOA.
k) Withdraws/ revises the bid upwards after becoming the L1 or successful bidder (downward revision by H1 in case of disposal).
l) Has parted with, leaked or provided confidential / proprietary information of NRL to any third party without the prior consent of NRL.
m) Bidder withdraws his quote after end of bid submission time & date (extended, where applicable).
n) GST registration/ account of the contractor is cancelled/ revoked/ seized by Government authority during the pendency of the contract.
o) If the Agency is or has become bankrupt, OR is being dissolved OR has resolved to be wound up OR if proceedings for winding up or dissolution has been instituted against the Agency.
p) Any other ground, including transgression of Integrity Pact, which, in the opinion of the Corporation makes it undesirable to deal with the Agency; In the case of transgression of Integrity Pact, the same should be substantiated by the verdict of the Independent External Monitor.

2.2 Communication by Administrative Ministry to NRL:

If a communication is received from the Administrative Ministry of NRL to ban an Agency from dealing with NRL, the Agency shall be automatically put on Holiday List for the time period specified therein and in case no time period is specified, for a period of One (1) year from the date of receipt of notice from the Administrative Ministry.

Holiday listing by other PSU/Government Departments shall not automatically extend to NRL unless the Administrative Ministry of NRL advises for the same.

3. Duration of Holiday Listing:

Sl No.	Reasons for holiday listing	Period of holiday listing
1	Indulged in malpractices (including cartel formation/collusive bidding/bid rigging) resulting in financial loss to the Company	2 years
2	Submitted fake, false or forged documents / certificate	2 years
3	Has submitted materials in lieu of materials supplied by NRL or has not returned or has unauthorizedly disposed off materials/ documents/ drawings/ tools or plants or equipment supplied by NRL.	2 years
4	Has deliberately violated and circumvented the provisions of labour laws/regulations/rules, safety norms, environmental norms or other statutory requirements	2 years
5	Has deliberately indulged in construction and erection of defective works or supply of defective materials	2 years
6	Has not cleared NRLs previous dues, if applicable	1 year
7	Has committed breach of contract or has abandoned the contract	2 years
8	Poor performance of the Agency in one or several contracts / Failing to meet planned schedule in contracts specified to be for Refinery Turn Around (RTA) or Emergency Shutdown or for Onsite/Offsite Emergency / Supply of sub-standard materials / sub-standard quality of works / Performance of the contractor	1 year

	declared as **Unsatisfactory** on the basis of NRL's "Contractors' Performance Evaluation Procedure".	
9	Has not honoured the fax of award/ letter of award/ Contract/ Purchase Order/ after the same is issued by NRL or fails to provide the security as may be required for the performance of the contract within 30 days from LOA (unless further extended by NRL) or is found to have neglected / abandoned the Order / LOA.	2 years
10	Withdraws/ revises the bid upwards after becoming the L1 or successful bidder (downward revision by H1 in case of disposal) / L1 or successful bidder fails to abide by any declaration made during bidding stage.	1 year
11	Has parted with, leaked or provided confidential/ proprietary information of NRL to any third party without the prior consent of NRL	2 years
12	If the Agency is or has become bankrupt, OR is being dissolved OR has resolved to be wound up OR if proceedings for winding up or dissolution has been instituted against the Agency	2 years
13	Transgression of Integrity Pact, which, in the opinion of the Corporation, makes it undesirable to deal with the Agency; Breach of the Code of Integrity for Public Procurement (CIPP)	2 years
14.	Bidder withdraws their quote after end of bid submission time & date (extended, where applicable).	1 year
15.	GST registration/ account of the contractor is cancelled/ revoked/ seized by Government authority during the pendency of the contract.	Till the time the information of restoration of Vendor's GST registration by Government authority is made available to NRL.

In case after priced bid opening the L1 (or successful) bidder is not awarded the job for any mistake committed and acknowledged by him in bidding or withdrawal of bid or modification of bid or varying any term in regard thereof leading to re-tendering, such bidders shall be debarred/disqualified from participating in re-tendering of the same job(s)/item(s), pending disposal of holiday listing proceedings, if any. Banning of business dealings, as applicable, shall be separately taken up as per clause 4.1 below.

In case of re-tendering for balance job(s) for defaults on part of the contractor (Short Closure/ Offloading/ Termination), such contractor may be debarred/disqualified from participating in the re-tender by NRL, on case specific basis, pending disposal of holiday listing proceedings, if any, as per clause 4.1 below.

4.1 Banning of Business Dealings:

a) Before placing the Agency on holiday list, a fair opportunity of hearing the party shall be given by means of a Show Cause Notice. The Show Cause Notice should be issued to the Agency before placing the Agency on holiday list except of cases under Clause 2.2. EIC or the designated in-charge or department responsible for invitation of bids of a service, works or supply being satisfied that prima-facie the case is fit for banning, will serve a Show Cause Notice upon the agency to explain why action should not be taken against the agency, which agency should reply within 10 days of issue of notice (this time may be extended at the request of the Agency, if so warranted, for a period not exceeding 7 days), whereas, in cases of contracts specified to be for Refinery Turn Around (RTA) or Emergency Shutdown or for Onsite/Offsite Emergency declared by NRL, the notice period shall be maximum 48 hours, without any provision for extension. If requested by the firm, personal hearing may also be allowed.

b) In case the EIC or the designated in-charge or department responsible for invitation of bids issuing/recommending the show cause notice is satisfied with the submissions made by the alleged agency and recommends for closure of the case without pursuing further for debarment or with a caution letter to the agency depending on merit of the case, such recommendations with findings and reasoning etc. should be kept on record and the matter may be closed accordingly.

In case of no reply or unsatisfactory reply, the recommendations would be put up through the nodal department to the Competent Authority for final decision on banning as per provision of Para 3 above.

After obtaining the approval of the competent authority, HoD / In-Charge of concerned Commercial Section, will issue the necessary 'speaking order' of holiday listing (hereinafter referred as "Debarment Order") to the Agency with a copy to the Functional Head of Commercial Dept.

c) In cases where Holiday Listing is proposed based on advice from the Administrative Ministry, no show cause or formal decision by competent authority will be required. The Nodal Department will directly intimate the Agency that they have been placed in Holiday Listing by NRL based on the Ministry's advice.

d) The Debarment shall be automatically extended to all its allied firms. In case of joint venture/ consortium is debarred all partners will also stand debarred for the period specified in Debarment Order. The names of partners should be clearly specified in the "Debarment Order".

e) The period of debarment shall start from the date of issue of debarment order.

f) The Order of debarment will indicate the reason(s) in brief that led to debarment of the firm.

g) A bidder or any of its successors may be debarred from participating in any procurement process for a period not exceeding two years. Ordinarily, the period of debarment should not be less than six months.

4.2 Provision for Appeal:

i. An agency aggrieved with the decision of the "debarment order" shall have the option of filing an appeal against the order within a maximum of **one month** from the date of receipt of intimation of holiday listing.

ii. Consideration of any appeal for review, filed after expiry of the above period, shall be at the sole discretion of the Appellate Authority.

iii. On receipt of the Appeal from the Agency, the Appellate Authority, if it so desires, may call for comments from the Competent Authority / EIC / User / Commercial Department.

iv. The Appellate Authority, if it so desires, may also give an opportunity for personal hearing to the Appellant Agency.

v. After examining the facts of the case and documents available on record and considering the submissions of the Appellant Agency, the Appellate Authority may pass appropriate order before the period of debarment is over by which the Appellate Authority may either:

a) Uphold the decision of Competent authority with or without any variation / lesser period of Holiday Listing; OR
b) Annul the order of the Competent Authority.

The Appeal process may be completed within 60 days of filing of appeal with the Appellate Authority.

vi. No Appeal is permitted in case an Agency is placed in Holiday List by NRL, based on Administrative Ministry's advice.

4.2(a) Provision for revocation:

A debarment order may be revoked before the expiry of the Order, by the competent authority, if it is of the opinion that the disability already suffered is adequate in the circumstances of the case or for any other reason.

5. Effect of Holiday Listing:

1. No enquiry / bid / tender shall be entertained with an Agency as long as the 'Agency' name appears in the active Holiday list.

2. If an 'Agency' is put on the Holiday list during tendering:

a) If an 'Agency' is put on Holiday List after issue of the enquiry / bid / tender but before opening of the un-priced bid, the un-priced bid of the 'Agency' shall not be opened and BG/EMD, if submitted by the 'Agency' shall be returned. If an 'Agency' is put on Holiday List after un-priced bid opening but before price bid opening, the price bid of the 'Agency' shall not be opened and BG/EMD submitted by the 'Agency' shall be returned.

b) If an 'Agency' is put on Holiday List (in another tender or contract or for reasons not directly related to tender being evaluated), after opening of price bid but before finalization of the tender, the offer of the 'Agency' shall be ignored and will not be further evaluated and the BG/EMD if any submitted by the 'Agency' shall be returned. The 'Agency' will not be considered for issue of order even if the 'Agency' is the lowest (L1) or successful. In case such 'Agency' is lowest (L1) or successful, next lowest or qualified firm shall be considered as L1 or successful.

c) If contract with the 'Agency' concerned is in operation, (including cases where contract has already been awarded before decision of holiday listing) order for Holiday Listing from business dealings cannot affect the contract, because contract is a legal document and unless the same is terminated in terms of the contract, unilateral termination will amount to breach and will have civil consequences.

d) Even in the cases of risk purchase, no contract should be placed on such debarred firms.

e) Debarment in any manner does not impact any other contractual or other legal rights of the procuring entities.

6. Updation of records after holiday listing:

Once an Agency is holiday listed in accordance with the provisions of this policy, respective Commercial officer (DO) shall intimate the Vendor Master Governor. Accordingly following actions shall be taken by Vendor Master Governor:

a) Vendor master data in SAP shall be updated with Holiday Listing status and period.
b) Updated report on holiday listed vendors will be published in NRL website.
c) Necessary action to be taken in CPP portal to activate holiday listing of the vendor.
d) Necessary updation will also be done in case of any annulment / lessening of holiday period against order / approval by Appellate Authority.
e) An order for debarment passed shall be deemed to have been automatically revoked on the expiry of that specified period and it will not be necessary to issue a specific formal order of revocation.
f) In case of shortage of suppliers in a particular group, such debarments may also hurt the interest of procuring entities. In such cases, endeavor should be to pragmatically analyze the circumstances, try to reform the supplier and may get a written commitment from the supplier that its performance will improve.

7. Safeguarding Procuring Entity's Interests during debarment of suppliers:

Suppliers/ contractors/ consultants/ service providers are important assets for the procuring entities and punishing delinquent suppliers should be the last resort. It takes lot of time and effort to develop, register and mature a new supplier. In case of shortage of suppliers in a particular group of materials/equipment, such punishment may also hurt the interest of Procuring Entity. Therefore, views of the concerned Department may always be sought about the repercussions of such punitive action on the continuity of procurements. Past records of performance of the supplier may also be given due weightage. In case of shortage of suppliers and in cases of less serious misdemeanors, the endeavor should be to pragmatically analyze the circumstances, reform the supplier and get a written commitment from the supplier that his performance will improve. If this fails, efforts should be to see if a temporary debarment can serve the purpose.

****

SAMPLE SHOW CAUSE NOTICE

[On NRL Letterhead]

[WITHOUT PREJUDICE]

Ref. No.: [*Insert ref. no.*] Date: [*Insert date*]

To,
[*Insert Name of Contractor/ Vendor*]
[*Insert address*]

Kind Attn: [*Insert name and designation*]

Subject: Show Cause Notice

Ref:
i. Tender for "[*Insert name of Tender*]" (Tender No.: [*Insert Tender No.*]) ("**Tender**")
ii. Your Offer no.: [*Insert offer no.*] dtd. [*Insert date*] ("**Offer**")
iii. Letter of Acceptance No.: [*Insert LOA No.*] dtd. [*Insert date*] ("**LOA**")
iv. PO No.: [*Insert PO No.*] dtd. [*Insert date*] ("**PO**")

Dear Sir,

You are hereby directed to show cause in writing within ten (10) days from the date of this Show Cause Notice as to why your firm [*Insert name of contractor/vendor*] should not be put on NRL's holiday list under Clause (…) and be debarred from entering into any contracts with NRL for the following reasons:

[*Insert detailed reasons/references to tender/contractual clauses*]

Please note that your reply, if any, should be supported by documents and other evidence which you wish to rely on in support of your reply.

Should you fail to submit your reply within the aforementioned time period and/or fail to show adequate reasons for not putting your firm on NRL's holiday list, NRL shall be entitled to proceed in the matter as outlined above without any further communication.

This notice is issued without prejudice to the rights and remedies available to M/s. Numaligarh Refinery Ltd., in law, contract, and / or equity, all of which are expressly reserved.

For Numaligarh Refinery Ltd.,

[*Insert name of Officer*]
[*Insert designation*]

Internal Note:
**Grey parts to be deleted*
**Yellow parts to be suitably modified*

SAMPLE DEBARMENT ORDER

(Where Unsatisfactory Reply To Show Cause Is Received)

[On NRL Letterhead]

[WITHOUT PREJUDICE]

Ref. No.: [*Insert ref. no.*] Date: [*Insert date*]

To,
[*Insert Name of Contractor/ Vendor*]
[*Insert address*]

Kind Attn: [*Insert name and designation*]

Subject: Debarment Order

Ref:

i. Tender for "[*Insert name of Tender*]" (Tender No.: [*Insert Tender No.*]) ("**Tender**")
ii. Your Offer no.: [*Insert offer no.*] dtd. [*Insert date*] ("**Offer**")
iii. Letter of Acceptance No.: [*Insert LOA No.*] dtd. [*Insert date*] ("**LOA**")
iv. PO No.: [*Insert PO No.*] dtd. [*Insert date*] ("**PO**")
v. Show Cause Notice ref. no.: [*Insert no.*] dtd. [*Insert date*] ("**Show Cause Notice**")
vi. Reply to Show Cause Notice bearing reference no.: [*Insert no.*] dtd. [*Insert date*] ("**Reply**")

Dear Sir,

This is in reference to the Tender, your Offer, the Show Cause Notice, the Reply and all other communications in this regard.

Please note that after due consideration of the Reply and all evidence produced by you, NRL has decided to place your firm, [*Insert name of firm*] under holiday listing for a period of [*Insert no. of years*] years due to "[*Insert reason from Policy*]", in accordance with clause no. …. of the NRL 'Holiday Listing' policy.

[*Insert detailed and clear reasons for arriving at the decision, to make this debarment notice a "speaking order" of holiday listing*]

This notice is issued without prejudice to the rights and remedies available to M/s. Numaligarh Refinery Ltd., in law, contract, and / or equity, all of which are expressly reserved.

For Numaligarh Refinery Ltd.,

[*Insert name of Officer*]
[*Insert designation*]
HoD / In-Charge of [*Insert concerned commercial section*]

Internal Note:
**Grey parts to be deleted*
**Yellow parts to be suitably modified*

SAMPLE DEBARMENT ORDER

(Where Reply To Show Cause Is NOT Received)

[On NRL Letterhead]

[WITHOUT PREJUDICE]

Ref. No.: [*Insert ref. no.*] Date: [*Insert date*]

To,
[*Insert Name of Contractor/ Vendor*]
[*Insert address*]

Kind Attn: [*Insert name and designation*]

Subject: Debarment Order

Ref:
i. Tender for "[*Insert name of Tender*]" (Tender No.: [*Insert Tender No.*]) ("**Tender**")
ii. Your Offer no.: [*Insert offer no.*] dtd. [*Insert date*] ("**Offer**")
iii. Letter of Acceptance No.: [*Insert LOA No.*] dtd. [*Insert date*] ("**LOA**")
iv. PO No.: [*Insert PO No.*] dtd. [*Insert date*] ("**PO**")
v. Show Cause Notice ref. no.: [*Insert no.*] dtd. [*Insert date*] ("**Show Cause Notice**")

Dear Sir,

This is in reference to the Tender, your Offer, the Show Cause Notice, and all other communications in this regard.

Please note that inspite of the opportunity given to you, you have failed to show cause as required within the stipulated time period. As such, NRL has decided to place your firm, [*Insert name of firm*] under holiday listing for a period of [*Insert no. of years*] years due to "[*Insert reason from Policy*]", in accordance with clause no. …. of the NRL 'Holiday Listing' policy.

[*Insert detailed and clear reasons for arriving at the decision, to make this debarment notice a "speaking order" of holiday listing*]

This notice is issued without prejudice to the rights and remedies available to M/s. Numaligarh Refinery Ltd., in law, contract, and / or equity, all of which are expressly reserved.

For Numaligarh Refinery Ltd.,

[*Insert name of Officer*]
[*Insert designation*]
HoD / In-Charge of [*Insert concerned commercial section*]

Internal Note:
**Grey parts to be deleted*
**Yellow parts to be suitably modified*

UPDATED

PROFORMA FOR SELF DECLARATION OF DEBARMENT /BLACK-LISTING / HOLIDAY LISTING & ALLIED FIRMS

Job Name :

Tender No. :

(1) **SELF DECLARATION OF DEBARMENT / BLACK-LISTING / HOLIDAY LISTING**

I/We hereby declare that I am / we are currently not serving any holiday listing/ black-listing/ debarment orders issued by Numaligarh Refinery Limited (NRL) or Ministry of Petroleum & Natural Gas (MoPNG) debarring me/us from participation in tendering or carrying on business dealings with NRL / MoPNG.

I/We understand that bids from the bidders who are on holiday list by NRL or MoPNG will not be considered.

It is understood that any wrong declaration in this context shall make me / my agency / company liable for action under Holiday Listing procedure of NRL.

Note: "Ministry of Petroleum & Natural Gas (MoPNG)" is the Administrative Ministry of NRL and the term in this context shall mean the ministry itself and not the other PSUs or Departments under it.

2) **DECLARATION OF ALLIED FIRMS OF THE BIDDER**

I/We hereby declare that following are my/our allied firm(s) (*as defined in NRL's holiday listing policy*):-

Name(s), PAN and GST number(s) of our allied firms are as follows:-

Sl. No.	Name of Allied Firm	PAN	GSTN

It is understood that in case of debarment of me / my agency / company by NRL, the debarment shall be automatically extended to my/our allied firms.

Date: _____ (SIGNATURE OF BIDDER)

Place:

Note: *Please refer NRL's current "Policy for Holiday listing/ Banning/ Debarring of Contractors/ Suppliers" available in NRL website www.nrl.co.in for details.* [www.nrl.co.in → Tenders → Download Manuals → Holiday Listing Policy]

PROPOSAL FORMS

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(FORM-A)

BIDDER'S GENERAL INFORMATION

1.	Legal Name of Bidder (Company)	
2.	Date of Business (Company) Establishment	Day Month Year
3.	Country of Registration and Registration number:	
4.	Status of Firm	Proprietorship Firm/Partnership firm/ Limited Liability Partnership (LLP) firm/ Public Limited/ Pvt. Limited/ Govt. Dept. / PSU/ Others If Others Specify:_____ [Enclose relevant certificates / partnership deed/certificate of Registration, as applicable]
4(a)	Name of Proprietor/ Partners/ Directors of the firm/company	1. 2. 3.
4(b)	Name of Power of Attorney holders i.e. authorized personnel(s) of Bidder whose Digital Signature Certificate & signature has been used to upload/submit the bid	
5.	Address of Registered Office: *In case of Partnership firm, provide current address of the firm for ordering purpose.*	_____ _____ City :_____ Sate :_____ Pin/Zip :_____
6.	Operation/Working address if different from above:	_____ _____ City :_____ Sate :_____ Pin/Zip :_____

7.	Bidder's address where order/contract is to be placed	_____ _____ City :_____ Sate :_____ Pin/Zip :_____
8.	Address from where Goods/ Services are to be dispatched/ provided along with GST no. (In case supply of Goods / Services are from multiple locations, addresses and GST no. of all such locations are to be provided).	City: District: State: PIN/ZIP: GST No.:
9.	Telephone Number & Contact Information of address where order is to be placed	(_____)/(_____)/(_____) (Country Code)/(Area Code)/(Telephone No.) Mobile No.: …… e-mail ID: …… Fax No:……
10.	Internet Website (If Applicable)	
11.	ISO Certification, if any	[If yes, please furnish details]
12.	Change of Ownership: has there been any major change of ownership of the establishment over the past 5 years. If so kindly provide details and if not, please affirm by "**NONE**"	

[Signature of Authorized Signatory of Bidder]
Name:
Designation:

(FORM-B)

SELF DECLARATION

(AS PER ITB ON LETTERHEAD OF BIDDER)

Bidder's declaration as furnished herein below shall supersede the stipulations mentioned elsewhere in the Bid.

SL. NO.	DESCRIPTION	BIDDER'S DECLARATION
1.	We confirm that we are not on Black-list / Holiday List /Negative list/ Suspension list/ Banning List of NRL/EIL as on date of submission of our bid	☐ We confirm ☐ We do not confirm
2.	Confirm whether Integrity Pact is applicable or not as per S.no.6 of BDS. Note: If Integrity Pact is applicable, Bidder to submit the same alongwith Affidavit to IP in their unpriced bid.	☐ Applicable ☐ Not Applicable
3.	We confirm that we are not under liquidation, court receivership or similar proceedings.	☐ We confirm ☐ We do not confirm
4.	Whether any of the Directors of Bidder is a relative of any Director of Owner/EIL or the Bidder is a firm in which any Director of Owner/EIL or his relative is a Partner or the Bidder is a private company in which any director of Owner/EIL is a member or Director	☐ No relation ☐ Yes (Provide details)
5.	We confirm that the content of the enquiry document including price Schedule and Corrigendum/ Addendum (if any) have not been altered or modified	☐ We confirm ☐ We do not confirm
6.	In case a Bidder is MSE Bidder, Bidder to confirm/ note the following:	
a)	We confirm that we are Micro or Small Enterprises (as the case may be), as on the Bid due date, as per the guidelines for re-classification of micro, small and medium enterprises notified by Ministry of MSME vide Gazette Notification No. 2119(E) dated 26.06.2020	Confirmed

b)	We confirm that MSE Certificate i.e **Udyam Registration Certificate** has been submitted as mentioned in the Enquiry Document.	Confirmed
c)	We further confirm that copy of the said MSE certificate duly certified as specified in ITB and it's Appendix, duly authenticated as per ITB/IFB/NIT	Attached
d)	We note that in case MSE Bidder doesn't submit the **Udyam Registration Certificate** or submits invalid document or submit un-authenticated MSE document, such Bidders shall not be considered for providing benefits under MSE policy.	Noted

[Signature of Authorized Signatory of Bidder]
Name:
Designation:
Company Seal

(FORM-C)

COMPLIANCE TO BID REQUIREMENT

(TO BE SUBMITTED ON THE LETTERHEAD OF THE BIDDER)

NAME OF BIDDER : _____

RFQ DOCUMENT No :_____

We …… *(*)* hereby agree to fully comply with, abide by and accept without variation, deviation or reservation all technical, commercial and other conditions of the Bidding Document and its Technical & Commercial Amendments, issued by EIL.

We confirm that during detailed engineering, we will review and recommend the required Special tools & tackles and Commissioning spares, wherever specified in the enquiry document and supply the same without any additional cost and time implication to Purchaser.

We further hereby waive, withdraw and abandon any and all assumptions, deviations, variations, objections or reservations whatsoever hereto set out, given or indicated in our offer, clarifications, correspondence, communications, or otherwise with a view that the price bid and price implication (if any) submitted may be treated to conform to, in all respects, with the terms and conditions of the said Bidding Document including all Technical and Commercial Amendments

For and on behalf of
Authorised signatory
(Name and Signature of Authorised signatory)
Date:

* Here fill in the name of bidder.

** The Letter of Waiver must be signed by the person (s) authorized to sign.

(FORM-D)

SALIENT FEATURE OF BID

REFER AGREED TERMS AND CONDITIONS (ATC) (FOR INDIAN BIDDERS)/(FOR FOREIGN BIDDERS)

(FORM-E)

DELETED

(FORM-F)

SAMPLE FORMAT FOR POWER OF ATTORNEY (POA)

[To be submitted on Indian Non-Judicial Stamp Paper as per Indian Stamp Act, 1899 with Minimum of INR 100/- by Indian Bidders, OR, as per applicable Laws in Bidder's Country in case of Foreign Bidder as on the date of Affidavit]

Bidding Document No:

Name of Work/Item:

I, Mr./Mrs./Miss _____ <Insert Full Name>, S/o/D/o of Mr._____ <Insert Father's Name>, working as _____ _____ <Insert present Designation> in the Company/Firm _____ _____ <Insert full name of Company/Firm>, having its registered office at _____ <Insert full address of Company with Country Name> and working Office address at _____ _____<Insert full working office address with Country Name, in case different from registered office>, do hereby constitute, appoint and authorize Mr./Mrs./Miss_____(Name and residential address), S/o/D/o Mr._____ <Insert Father's Name>, working as _____ <Insert present Designation> in the Company/Firm and whose signature is attested below as the Attorney of the Company/ Firm to do in the name and on behalf of the Company/Firm all or any of the acts, deeds or things necessary in connection with or incidental to our Bid for the subject Enquiry Document, including but not limited to the signing and submission of application / proposal, participating in the meetings, responding to queries, submission of information / documents and generally to represent us in all the dealings with EIL/OWNER or any person, in connection with the works, without any prejudice, limitations and exceptions.

This POA shall be valid till the completion of the entire Bidding process, and in case the Order is awarded to our Company, till the complete discharge of all the contractual obligations and execution of the Works/Orders or till Completion Certificate (unconditional) is issued by the OWNER or till the settlement of all disputes, if any, whichever is later, unless otherwise replaced with Separate Power of Attorney in due course, in which case all responsibilities, obligations and liabilities with respect to this POA shall be construed to be seamlessly transferred to the newly appointed POA Holder.

For & on behalf of
<Name of Bidder>

_____
Signature of person in whose favour POA is issued
Name:
Designation:
Date:
Signature attested and Accepted
_____(signature)
(Name, Title and Address) of the Attorney
Designation:
Date & Seal
Note
Wherever required, the executant(s) should submit for verification the extract of the charter documents and/or documents such as board of resolution passed for this purpose (in case of company) in favour of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the executant(s).

(FORM G)

BANK MANDATE FORM
(FOR INDIAN SUPPLIER)
(As per ITB)

1.	Bidder Name	:
2.	Bidder Code	:
3.	Address of the Bidder	:
4.	Particulars of Bank Account of Bidder	:
a)	Name of the Bank	:
b)	Name of the Branch and Address of the Branch	:
c)	Branch Code	:
d)	9-Digit MICR code Number of the Bank & Branch (As appearing in the MICR Cheque issued by the bank) (Please do not give multicity cheque book code Number)	:
e)	**Type of account (Saving Bank, Current or Cash Credit)**	:
f)	**Account Number**	:
g)	**RTGS/IFSC Code (11 digit)**	:
h)	**NEFT Code No.**	:
5.	E-mail address of the Bidder	:
6.	Contact Person(s) of the Bidder	:

I/we declare that the particulars given above are correct and complete and I/we accord our consent for receiving all our payments through Electronic Mechanism.

_____
(Signature and designation of the Authorized person(s) of Bidder)

Official seal of the Bidder

Place :
Date :

BANK CERTIFICATION

Certified that the particulars furnished above are correct as per our records.

Place :
Date :

_____
Signature of the Authorized Official of the Bank
Bank's Stamp

BIDDER TO ENSURE SUBMISSION OF CANCELLED CHEQUE WITH THIS MANDATE FORM

FORM - I: INDEMNITY BOND CUM UNDERTAKING

(In Letter Head of Company /Firm)

Project :
RFQ No. :

Recipient Name: **M/s Numaligarh Refinery Limited**

Assam: Address: NRP Complex, NRL site, Numaligarh, Golaghat, Assam-785699
GSTIN No. 18AAACN6984B1ZD

West Bengal: Address: Forth floor, plot no.31, Bharat Bhawan, 118 Prince Gulam Md.Shah Road, Golf Green, Kolkata, West Bengal-700095
GSTIN No.19AAACN6984B1ZB

Delhi: Address: 6th Floor, 15-17, Tolstoy house, Tolstoy Marg, New Delhi-110001
GSTIN No: 07AAACN6984B2ZF

Sub: Payment of GST Amount and filing of GST Return for availing Input Tax Credit (ITC) by Numaligarh Refinery Limited (NRL).

Sir / Madam,

With reference to payment of GST amount and filing of GST Return for availing Input Tax Credit (ITC) by NRL as per eligibility provisions for the identified Invoices raised by us, we, M/s _____, having our Registered Office at _____, possessing GST Identification No _____hereby declare and undertake as follows:

1. We have disclosed all the facts relating to our firm to M/s Numaligarh Refinery Limited
2. We hereby agreed and undertake to file GSTR-1 on time i.e. 11th of the next month so that NRL can take Input Tax Credit by matching GSTR-2A.
3. We hereby declare that we shall deposit GST for the related invoices by 20th of the succeeding month as per the provision of GST law.
4. We hereby declare that we will file GSTR 3B related to all invoices in time i.e. 20th of the next month.
5. We hereby agree and undertake to indemnify as under:-

a. The Firm / Company shall take all necessary safeguards to ensure availing of ITC for all invoices raised on NRL without any financial loss to NRL.

b. In case of rejection of ITC by the concerned Tax Authority, for non-payment of GST amount by us or for any other reasons attributable to us, we hereby undertake and agree to indemnify NRL in full against all consequences, liabilities of any kind whatsoever directly arising from denial of ITC which includes interest and penalty arising out of such irregular availment of ITC by you opined by GST Authority.

c. We hereby agree and confirm that, any breach of the above indemnification or undertakings shall be construed as breach of the terms and conditions for reimbursement of GST and NRL shall be at liberty to take such action against us including recovering of reimbursed GST amount from
   i. Any of our Bank Guarantee executed in your favour, if any,
   ii. Security Deposit paid for any of your work, if any or
   iii. Other unpaid invoices, if any of us raised with recipient

Authorized Signature of the Indemnifier

Name:
Designation:
Seal:
Date:

(FORM-J)

BIDDER'S FINANCIAL DETAILS

(Applicable for open competitive bidding only)

The bidder shall indicate herein his annual turnover during preceding 3 (Three) Financial years based on the audited balance sheet/Profit & Loss account statement/ Audited Published Annual Report as per provision of NIT/IFB

A. FINANCIAL DETAILS

1.	**FINANCIAL YEAR/ YEAR ENDING**	**ANNUAL TURNOVER (RS.) As per Audited Annual Report**
a.	Year 1 (2024-2025)	
b.	Year 2 (2023-2024)	
c.	Year 3 (2022-2023)	
2.	**NET WORTH FOR LATEST FINANCIAL YEAR (2024-2025): RS. .....**	

Note: The details furnished above by the bidder shall be for information purpose only. The actual qualification criteria shall be as per the relevant clauses of NIT/IFB

SIGNATURE OF BIDDER :
NAME OF BIDDER :
COMPANY SEAL :

(FORM-K)

The bidder shall submit herein the **PAN No, PF no, ESI Registration No and GST Registration No** of the firm. Non submission of the same shall make the bid liable for Rejection.

1	Permanent Account Number (PAN) (In India) of the Firm	PAN No:_____
2	Provident Fund(PF) Registration No of the Firm	PF No:_____
3	ESI Registration Code of the Firm	ESI Registration Code:_____
4	GST Registration No & Place of registration of the firm	GSTIN: _____ Place of Registration:_____
5	Proprietorship Affidavit (If Applicable)	

BIDDER'S SIGNATURE: _____

(FORM-L)

FORMAT FOR BIDDERS' QUERIES (PRE-BID)
(AS PER ITB)

Bidding Document /RFQ No: _____

Name of Bidder: _____

Sl no.	Reference of Enquiry Document.				Bidder's Query	EIL Reply
	Par/Vol	Page No	Clause No	Subject		

NOTE:

1. **The Pre-Bid Queries shall be submitted through e-procurement Portal as mentioned in IFB.**
2. **Also send the editable soft format through e-mail**

SIGNATURE OF BIDDER _____
NAME OF BIDDER _____

POLYPROPYLENE UNIT (PPU) PROJECT AT NUMALIGARH REFINERY, NRL AGREED TERMS & CONDITIONS
(ATC)
(FOR INDIAN BIDDERS)

Supplier Name: M/s _____

RFQ No.:_____

Supplier's Offer Ref No.:_____ dated_____

Tel. No. _____ Mob. No. _____ Fax No. _____

Contact Person:E-mail__ (*use capital letters only*)

1. All correspondence must be in **English** language only.
2. This is a pre-filled "questionnaire" and Bidder to accept and submit it on line, duly signed and stamped on each page, as a token of their acceptance of all commercial terms and conditions.
3. All commercial terms / compliance / salient details are given /confirmed in this questionnaire and Bidding Forms/Annexures to ITB itself and not elsewhere in the Offer. In case of contradiction, the confirmation given herein and in Bidding Forms by the Bidder shall prevail over the declaration / statement / confirmation given in other places by the Bidder. Bidder to note that the terms and conditions mentioned elsewhere in their offer or Bidder's own terms and conditions shall not be given cognizance.
4. **Failure on the part of the Bidder in submitting this duly pre-filled "questionnaire" online with the Un-priced bid and/or submitting incomplete replies may lead to rejection of Bidder's Offer.**
5. Bidder's offer shall be in total compliance with RFQ documents containing commercial and technical specifications including general/ technical notes and scope of supply/work including documentation as per material requisition (MR) and subsequent technical/ commercial amendment, if any, and technical/commercial corrigendum, if any.

SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
1.	**Price Basis:** Quoted supply prices are on FOT despatch point basis inclusive of Packing & Forwarding charges and third party inspection charges (as applicable), as per Price Schedule Format enclosed.	*Confirmed*
	Specify Despatch Point	*Refer Annexure-I*
	Quoted price is inclusive of all taxes and duties except GST(i.e. IGST or CGST and SGST/UTGST applicable incase of interstate supply or intra state supply respectively and GST compensation cess, if applicable).	*Confirmed*
2.	**Transportation:** Confirm that firm transportation charges excluding GST, upto handing over of all materials to NRL/NRL appointed Contractor at location specified in NIT/RFQ Cover / BDS, has been quoted separately in Price Schedule.	*Confirmed, Quoted in Price Schedule*

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SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
3.	Owner shall take comprehensive marine-cum-erection all risk policy (MCEAR) for the project. Accordingly, cost towards the same shall not included in quoted price. Confirm that Supplier/bidder is responsible till the material is handed over to NRL or NRL's appointed contractor, including transit and storage risk at the supplier's warehouse.	*Noted and Confirmed*
4.	**Details of Taxes / Duties applicable extra on Goods / Services:** **Goods and Services Tax (GST) applicable extra on finished goods:**	*Bidder to fill all details in attached Annexure-I to ATC*
	a) Present rate of GST payable extra on products(including spares)	*Quoted in Annexure-I to ATC (as applicable)*
	b) HSN (Harmonized System Nomenclature) No.	*Quoted in Annexure-I to ATC*
	c) Confirm compliance to provisions of Goods and Services Tax (GST) as per Annexure-II of SPC.	*Confirmed*
5.	***Variation in taxes / Duties:*** *No variation on account of taxes and duties, statutory or otherwise, shall be payable to bidder/Vendor except for the following*	
	a) <u>GST</u> If after the due date of submission of last price bid and upto the contractual delivery period (including extended contractual delivery period for the reasons attributable to Owner or due to Force Majeure condition), any increase/decrease occurs in the applicable rate of GST, the variation in such GST shall be to Owner's account and shall be adjusted (increase/decrease) to/from the Vendor's invoices based on the documentary evidence. Confirm Compliance.	*Noted & Confirmed*
	Any increase in GST after the contractual delivery period (including extended contractual delivery period for the reasons attributable to Owner or due to Force Majeure condition) shall be to vendor's account. However, any decrease in the rate of GST shall be passed on to Owner. Confirm Compliance.	*Noted & Confirmed*
	b) <u>Basic Custom Duty & Social welfare surcharge</u>: If after the due date of submission of last price bid and upto the 2/3rd of contractual delivery period (including extended contractual delivery period for the reasons attributable to Owner or due to Force Majeure condition), any increase/decrease occurs in the applicable rate of Basic Customs duty & Social welfare surcharge on materials imported, the variation in such	*Noted & Confirmed*

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SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
	Basic Customs duty & Social welfare surcharge shall be to Owner's account and shall be adjusted (increase/decrease)to/from the vendor's invoices based on the documentary evidence. Confirm Compliance.	*Noted & Confirmed*
	Any increase in Basic Customs duty & Social welfare surcharge on materials imported after the 2/3rd of contractual time for delivery/ extended time for delivery (by owner due to reasons attributable to Owner or due to Force Majeure condition) shall be to vendor's account. Confirm Compliance.	*Noted & Confirmed*
	However, any decrease in the rate of Basic Customs Duty & Social welfare surcharge on materials imported shall be passed on to Owner. Confirm compliance.	*Noted & Confirmed*
	For calculating Statutory Variations ceiling amount of CIF value as declared by the Bidder in price schedule shall only be considered. Confirm compliance.	*Confirmed*
	Statutory variations on IGST (included in quoted prices) in case of imported materials from outside India in vendor's name shall be to vendor account. Confirm compliance.	*Confirmed*
6.	**<u>Spares Parts:</u>** Confirm item wise unit price (FOT Despatch Point) of following spare parts as required in Material Requisition (MR) have been indicated in price schedule with itemized quantity.	*Confirmed*
	a) Mandatory Spares are quoted as per MR.	*Confirmed (If Applicable as per MR)*
	b) Commissioning spares as specified in MR are included in the quoted Price.	*Confirmed (If Applicable as per MR)*
	c) Special Tools & Tackles as specified in the MR are included in the quoted prices.	*Confirmed (If Applicable as per MR)*
	d) Confirm spares wherever required have been included in the quoted price and list of spares is also furnished.	*Confirmed (If Applicable as per MR)*
	e) Recommended Spares for Two Years Operation & Maintenance, as specified in MR have been quoted separately with Price validity of **Two (2) years** from date of Supply of Main Items/ Equipment. & List of such spares has been furnished in the Unpriced Bid.	*Confirmed (If Applicable as per MR)*
7.	**<u>Services for Site Work:</u>** For Site Work, if in the scope of the Bidder as per MR, please confirm the following:	*Confirmed*
	a) Confirm that the prices for site work have been quoted in the price schedule.	*Confirmed (If Applicable as per MR)*
	b) Confirm that quoted site work prices are exclusive of GST but inclusive of all other applicable taxes and duties.	*Confirmed (If Applicable as per MR)*

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SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
	c) Rate in Percentage (%) of GST as applicable extra on site work charges.	*Quoted in Annexure-I to ATC*
	d) All necessary registrations, if required, for carrying out the site activities shall be done by the bidder and costs towards the same shall be included in quoted site work prices.	*Confirmed*
	e) Site work charges has been quoted in accordance with the **Annexure-VI of SPC** (Terms & Conditions for Installation/Site Work) enclosed with the NIT/RFQ Document.	*Confirmed*
8.	**Service Charges (Lumpsum / Per-diem) for Supervision / Training / AMC / PWAMC / Hazop /3-D Modeling etc:**	
	a) Per diem rate / lump sum Charges for Services of **Supervision / Training / AMC / PWAMC / Hazop / 3-DModeling**, if in the scope of the Bidder as per MR have been indicated by bidder separately in the Price Schedule.	***Confirmed, Quoted in Price Schedule***
	b) Confirm that Per diem rate / lumpsum Charges for Services is excluding GST.	*Confirmed*
	c) Percentage of GST as applicable extra on Services.	*Quoted in Annexure-I to ATC*
	d) Per-diem rate/ Lumpsum Charges for Services of **Supervision / Training / AMC / PWAMC / Hazop /3-D Modeling** has been quoted in accordance with the Terms & Conditions stipulated in the SPC/GPC enclosed with the RFQ document. Confirm Compliance.	*Confirmed*
9.	Confirm documentation charges as per MR are included in quoted prices.	*Confirmed*
10.	**Delayed Delivery:**	
	a) Confirm acceptance of Delayed Delivery clause as specified in GPC & Special Purchase Conditions (SPC) /Bid Data Sheet (BDS) enclosed in RFQ Document.	*Confirmed*
	b) In case of delay, vendor will reduce the invoice amount by applicable reduction.	*Confirmed*
11.	**Delivery / Completion Period:**	
	a) Confirm acceptance to delivery / completion period as stipulated in NIT/RFQ, BDS, Amendments (as applicable).	*Confirmed*
12.	**Payment Terms:**	
	a) Confirm acceptance of "Payment Terms" as per **Annexure-I to SPC** of RFQ Document.	*Confirmed*
	b) No initial advance payment along with order shall be made by the Owner against supplies as well as services. If a supplier insists on the same, the offer shall be rejected.	*Confirmed*
	c) Payments shall be released after adjustment of Price Reduction Schedule on account of delayed delivery, if any.	*Confirmed*

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SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
13.	**Purchase Preference (MSE BIDDERS):**	
	a) Confirm whether the Bidder is a MSE Bidder or not.	***Yes/No*** *(tick √ whichever is applicable)*
	b) Confirm owner of Bidder's organization belongs to Gen/SC/ST Category.	***Gen/SC/ST***
	c) In case owner of Bidder's organisation belongs to SC/ST, then Bidder to submit SC/ST Certificate as specified in the ITB/IFB/NIT	*Applicable and enclosed / Not applicable*
	d) Confirm whether owner of Bidder's organisation belongs to Women Category.	***Yes/No***
	e) In case owner of Bidder's organisation belongs to Women category then Bidder to submit requisite documents as specified in the ITB/IFB/NIT.	*(tick √ whichever is applicable)* *Applicable and enclosed / Not applicable*
	f) MSME bidders registered under Trade Receivable e- Discounting System (TReDS) shall furnish details of registration with registration No. & date.	*Registration No. _____Dated.*
	Note:-Incase the Bidder does not tick mark specifically against 13(a), (b) &(d) and & does not submit any relevant documentary evidences in their Un-priced Bid it will be assumed that bidder is a Non MSE / Non SC / ST / Non Women & No benefit shall be extended to such bidder to this effect.	
14.	**Purchase Preference (Preference to Make in India)**	
	a) Confirm whether the Bidder is Class-I local supplier or Class-II local supplier as per PPP-MII Policy.	***Yes/No*** *(tick √ whichever is applicable)*
	b) If yes, Bidder confirms to comply with the requirements / conditions defined in Appendix III to ITB.	*Noted & Confirmed*
	c) If yes, Bidder shall also submit required documents FORMAT–2A / FORMAT–2AA /FORMAT–2B/FORMAT-2C (as applicable), of Appendix III to ITB to support the same.	*Submitted*
	d) Bidder shall furnish the percentage of the local content as per Appendix-III to ITB attached with RFQ document in Unpriced bid.	*Indicated in FORMAT of Appendix III to ITB*
	e) Incase bidder does not furnish the above details, no purchase preference linked with Local Content, shall be applicable.	*Noted*
15.	**Part order:**	
	a) Confirm acceptance of Part Order clause as per BDS, SPC, GPC of RFQ Document (if applicable as per MR)	*Confirmed*
	b) Items may be split (wherever applicable) to meet the Public Procurement Policy, 2012 for MSEs (Micro & Small Enterprise) or Purchase Preference (Preference to Make in India) (PPP-MII) issued by Govt. of India. Confirm Acceptance	*Confirmed*
	c) Any charges quoted extra as lump sum shall be applicable pro rata on value basis in the event of part order.	*Confirmed*

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SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
16.	**Repeat Order:** Confirm Acceptance of Repeat Order clause as per BDS, SPC, GPC of RFQ Document.	*Confirmed*
17.	**Contract Performance Security (CPS) and Warranty Bank Guarantee (WBG)**	
	a) Confirm submission of CPS and WBG as per BDS, SPC, GPC of RFQ Document.	*Confirmed*
	b) Wherever supervision is included in the scope specified in the MR, Confirm submission of additional BG as per BDS, SPC, GPC of RFQ Document.	*Confirmed*
	c) In case of package contract where scope of the purchase order also involves Post Warrantee Annual Maintenance Contract (PWAMC), Confirm submission of additional BG as per BDS, SPC, GPC of RFQ Document.	*Confirmed*
	d) The CPS and WBG shall be strictly as per the enclosed proforma and shall be from a bank as specified in SPC. Confirm Compliance	*Confirmed*
18.	**Guarantee/Warranty:** Confirm acceptance to Guarantee/Warranty clause as mentioned in the GPC/SPC.	*Confirmed*
19.	**Firmness of prices** Confirm quoted prices shall be firm and fixed and not subject to any variation whatsoever, except Statutory variation in taxes & duties and new taxes as per **Annexure – II to SPC**	*Confirmed*
20.	**Testing and Inspection charges:**	
	a) Goods and Services shall be subject to stage wise and final inspection by Third Party Inspection (TPI) agency (List of approved TPI agencies provided in the SPC). The TPI charges shall be included in quoted prices, and no additional charges shall be paid by Owner.	*Confirmed and included in supply price, if applicable*
	b) Similarly, all built in import content (if applicable) shall also be subject to inspection by TPI agencies, in the country of origin of the import content, and charges for the same are included in quoted prices, and no additional charges shall be paid by Owner.	*Confirmed and included in supply price, if applicable*
	c) Inspection of Goods at manufacturer's works within India and raw materials/components sourced within India shall be carried out by NRL approved Third Party Inspection Agency. However, wherever Inspection by EIL is specified as per approved Inspection Test Plan (ITP) enclosed with Material Requisition (MR), the same shall be carried out by EIL without any additional cost to supplier.	*Noted and Confirmed*
	d) Quoted prices are inclusive of all testing and inspection charges (if applicable as per MR).	*Confirmed*

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SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
	e) Quoted prices are inclusive of all IBR/IGC/NACE charges (if applicable) as per MR.	*Confirmed*
	f) Quoted prices are inclusive of all statutory certification charges PESO etc. (if applicable as Required in the MR)	*Confirmed*
	g) Is your shop approved by IBR/PESO(Petroleum & Explosive Safety Organisation) [Formerly CCE] authority and has sufficient validity to execute the order/contract, if awarded	*Approved and Valid upto* _____
21.	Built-in import content in the offer **(Tick one whichever is applicable).** **(In case no option is selected, Built-in import content shall be considered to be not applicable)**	☐ *Applicable* ☐ *Not applicable*
	a) If your offer is based on certain imported raw materials required for equipment / materials offered, kindly confirm to the relevant provisions of Import Duties as per **Annexure II** to SPC.	*Confirmed if applicable*
22.	**Validity of Bid:** Confirm Bid validity as stipulated in NIT/RFQ/ BDS from the final due date of bid submission.	*Confirmed*
23.	**Compliance to RFQ documents:**	
	a) Confirm your offer is in total compliance with RFQ Document containing technical specifications including General/Technical notes, scope of supply/services/site work (as applicable) including documentation as per Material Requisition (MR) and subsequent amendment and corrigendum, if any.	*Confirmed*
	b) Confirm your offer is in total compliance with RFQ document containing commercial terms and conditions as per the following documents, without any deviation: i) Request for Quotation (RFQ) ii) Instructions to Bidders(ITB) iii) Bid Data Sheet(BDS) iv) Special Purchase Conditions(SPC) v) General Purchase Conditions(GPC) vi) Terms & Conditions of Site work / GPC / HSE vii) Integrity Pact viii) Terms & Conditions for Supervision services/ Training/ Hazop/ AMC/ PWAMC/ PGTR/ 3-D Modeling etc (as applicable to MR) ix) Any other document enclosed with RFQ.	i) *Confirmed* ii) *Confirmed* iii) *Confirmed* iv) *Confirmed* v) *Confirmed* vi) *Confirmed (if applicable)* vii) *Confirmed (if applicable)* viii) *Confirmed (if applicable)* ix) *Confirmed (If applicable)*
	c) Any deviation to Terms & Conditions may lead to rejection of offer, except deviations for which loading is defined in the RFQ Document.	*Confirmed*

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SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
24.	a) In case of NIT / IFB / Open Enquiry, Owner / EIL reserves the right to verify the credential of the evaluated L1 bidder. The document submitted by the L1 bidder/ Supplier towards their prequalification as per "Bidder Qualification "of NIT / IFB shall be verified by EIL from the document issuing authority through e-mail/letter or visit. Bidder shall provide complete assistance towards the same. It shall also be the responsibility of the bidder to assist Owner/EIL in carrying out this exercise. Confirm Compliance.	*Confirmed*
	b) Bidder shall ensure that they shall submit those executed works meeting the qualification criteria for which they can arrange such verification from their respective clients as per relevant provision(s) of IFB / NIT / RFQ. Confirm Compliance.	*Confirmed*
25.	Please confirm your offer contains the following:	
	a) **UNPRICED OFFER**-without any Deviations	*Confirmed*
	b) **PRICED OFFER**-Duly filled Price Schedule of RFQ with relevant annexure. (Without any deviation, clarification, assumption etc.)	*Confirmed*
26.	Confirm you have submitted duly signed and stamped Integrity Pact (if applicable as per RFQ) along with unpriced Bid.	*Confirmed*
27.	Confirm that you have quoted strictly for items based on your registration/approval with EIL as on the date of issue of RFQ (if applicable & if enquiry is issued to EIL enlisted Suppliers).	*Confirmed*
28.	We understand that RFQ Document is not exhaustive. In case any activity though specifically not covered in description of Price Schedule but is required to complete the work as per MR, GPC,SPC, or any other part of RFQ document, the quoted price will deemed to be inclusive of cost incurred for such activities unless otherwise specifically excluded. We confirm to perform for fulfillment of the order and completeness of the supplies in all respect within the scheduled time frame and quoted price.	*Confirmed*
29.	Bidder to quote as per the requirements and terms and conditions of the RFQ Document including all the enclosures and not to stipulate deviations/exceptions. Once quoted, the Bidder shall not make any subsequent price changes, whether resulting or arising out of any technical/commercial clarifications and details sought on any deviations, exceptions or stipulations mentioned in the Bidder's offer unless any amendment to RFQ Document is issued by OWNER / EIL seeking price implication. Similarly, no revision in quoted price shall be allowed should the deviations stipulated by Bidder are not accepted by OWNER/EIL and are required to be	*Confirmed*

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SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
	withdrawn by Bidder in favor of meeting the requirements and complying to the terms and conditions of the RFQ Document. Any unsolicited proposed price change by the Bidder is likely to render the Bidder's offer liable for rejection. Confirm compliance.	
30.	Bidder to confirm compliance to Domestically Manufactured Iron & Steel Policy as per Govt of India Notification (enclosed in RFQ Document).	*Confirmed*
31.	Printed terms and conditions of the bidder, if any, appearing in offer, shall not be applicable in the event of order. In case of contradiction between the confirmations given above and terms & conditions mentioned else wherein the offer, the confirmation given above in this ATC shall prevail.	*Confirmed*

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ANNEXURE-I To ATC

POLYPROPYLENE UNIT (PPU)
PROJECT AT NUMALIGARH REFINERY,
NRL

DETAILS OF TAXES AND DUTIES

Supplier Name: M/s _____

RFQ No.:_____

Supplier's Offer Ref No.:_____ dated_____

The salient features of the offer are as below:

1. Specify Despatch point 2. GSTIN no. of dispatch point	_____ _____	
3. Specify Invoicing place 4. GSTIN no. of invoicing place	_____ _____	
5. HSN code of Goods	i) _____ ii) _____ iii) _____	
6. GST applicable extra on quoted FOT despatch point prices	Intrastate **(CGST+SGST/ UTGST)**	_____% **EXTRA**
	Interstate **(IGST)**	_____% **EXTRA**
7. GST rate applicable on Freight	% EXTRA	
8. SAC code for Site Supervision / Site Work /Training Charges / AMC / PWAMC / HAZOP / 3D modelling / PGTR	_____/_____/_____	
9. GST applicable extra on quoted Site Supervision / Site Work / Training Charges/ PWAMC/ HAZOP/ 3D modelling / PGTR/ Extended Warranty/ any other services, if applicable	_____% EXTRA	
10. If the Supplier is currently unregistered due to turnover below threshold, undertaking / letter stating reason for non-obtaining registration *	YES ( )* / NO( )*	
11. In case the Supplier is located in SEZ, declaration / undertaking / certificate shall be provided *	YES ( )* / NO( )*	
12. Whether Supplier is registered as a composite dealer / Agency in GST regime*	YES ( )* / NO( )*	

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13. Supplier to indicate the complete name and address on which order to be placed by NRL (in the event of an order)	_____ _____ CITY :_____ District : _____ State : _____ PIN/ZIP: _____ Mob No.: _____ e-mail ID: _____

*-(√)whichever is applicable

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POLYPROPYLENE UNIT (PPU) PROJECT AT NUMALIGARH REFINERY, NRL

SPECIAL PURCHASE CONDITIONS (SPC)

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1.0 DEFINITIONS

1.1 Numaligarh Refinery Limited (NRL) hereinafter called "the Owner/ Purchaser/Employer" has awarded "Engineering, Procurement & Construction Management (EPCM) Consultancy Services for Polypropylene (PP) Project at Numaligarh Refinery, Assam" hereinafter called "Project" to Engineers India Ltd (EIL).

1.2 Engineers India Ltd (EIL) hereinafter called "the Consultant/PMC" on behalf of NRL, invites e-bids under single stage two part system / single stage single part system (as applicable), as described in the Bidding Document.

1.3 Bidding Document/ RFQ Document/ Enquiry Document/ Tender Document means document to be issued to Bidder(s) based on which Bid is to be submitted by Bidder(s). Throughout this Bidding Document, the term "Contract" and "Purchase Order (PO)" are synonymous.

1.4 Bidder shall mean any person, company, firm or body to whom Bidding Document is issued by NRL/ Consultant and submits the bid.

1.5 "Bid/Offer" means the documents/proposal submitted by Bidder. Throughout this Bidding Document, the term "bid" and "tender" and their derivatives ("bidder/tenderer", "Bid/tendered/tender", "bidding/tendering", etc.) are synonymous, and day means calendar day. Singular also means plural.

1.6 Where any portion of the General Purchase Conditions (GPC) is repugnant to or at variance with any provisions of the SPC then, unless a different intention appears, the provisions of the SPC shall be deemed to govern the provisions of the GPC and SPC provisions shall prevail to the extent of such repugnancy, or variations exist.

1.7 **Order of precedence**

The documents forming the Purchase Order are to be taken as mutually explanatory of one another. If there is an ambiguity or discrepancy in the Term & Conditions defined in the various documents, the order of Precedence shall be as follows:

- Purchase Order and its enclosures along with Purchase Requisition
- Amendment to Bidding Document, if any
- RFQ cover letter / Notice Inviting Tender (NIT) /Invitation for Bid (IFB) along with Bid Data Sheet
- Job Specifications
- Drawings
- Special Purchase Conditions (SPC)
- Technical specifications
- Instructions to Bidders (ITB)
- General Purchase Conditions (GPC)
- Other Documents

A variation or amendment issued after the execution of the formal contract shall take precedence over respective clauses of the formal contract and its Annexure.

2.0 SCOPE OF SUPPLY / WORK

2.1 The scope of supply/work shall be as given at Material Requisition (MR) / Purchase Requisition (PR) enclosed with this Enquiry Document.

3.0 PRICE BASIS

3.1 Clause 1 of General Purchase Conditions (Indigenous) stands replaced as under:

Prices are to be quoted on FOT / FOR Dispatch Point basis inclusive of packing & forwarding

charges and third-party inspection charges (as applicable).

3.2 Change in Point of Despatch / Port of Shipment - The seller shall not be allowed to change the point of dispatch, unless the seller absorbs any additional cost on account of change only with prior approval from NRL / Consultant.

4.0 FIRM PRICES

The prices shall be firm and fixed and not subject to any variation whatsoever, except Statutory variation in taxes & duties and new taxes as per **Annexure – II to SPC**. For 2 years O&M spares, prices shall be kept valid for a period of 2 years from the date of Supply of Main Items/ Equipment.

5.0 TRANSPORTATION

5.1 For Indian Bidders:

Materials shall be delivered on freight prepaid and door delivery basis (up to site/warehouse/ storage yard).

6.0 DELIVERY /COMPLETION SCHEDULE

6.1 All goods under the scope of the seller shall be shipped as per the schedule specified in NIT/IFB/RFQ.

6.2 During execution of order, failing to meet delivery /completion schedule will be subject to Price Reduction as per **Clause 15 [titled "Delayed Delivery"]** of SPC and/or other remedies available to the Purchaser in Bidding Document.

6.3 Time of delivery as mentioned in the Purchase Order shall be the utmost important of the agreement and no variation shall be permitted except with prior authorization in writing from the Purchaser. Goods should be delivered securely packed and in good order and condition at the place and within the time specified in the Purchase Order for their delivery. The Purchaser reserves the right to defer the period of delivery in writing.

6.4 The delivery period shall be reckoned from the date of Letter of Acceptance (LOA) / Purchase Order (PO) (whichever is issued earlier).

6.5 Supplier shall submit Billing Schedule within three weeks after placement of LOA /PO (whichever is issued earlier) for Consultant/OWNER's approval (wherever applicable). Supplier may deliver the PO quantity in a single lot or in a staggered manner (Maximum 3 lots) within the given delivery period as per RFQ Document. In case the Supplier delivers the PO items in more than 3 lots, than bidder may obtain a specific approval from the Project Manager of Consultant.

7.0 PAYMENT TERMS

7.1 Payment terms for the scope of supply/services shall be as per attached **Annexure – I to SPC**.

7.2 No initial advance payment along with order shall be made by the Owner against supplies as well as services. If a supplier insists on the same, the offer shall be rejected.

7.3 In case of advance payment against milestone, then equivalent ABG is to be submitted as per the payment terms. And the validity period of such ABGs shall be the contractual delivery period (CDD) with invocation/claim period of further 3 months. And wherever such extension of validity of ABGs shall be required due to delay in delivery or for any other reasons(s) then vendor shall provide extension for equivalent period.

7.4 Payments shall be released after adjustment of Price Reduction Schedule on account of delayed delivery, if any.

7.5 An amount equivalent to the extent of eligible Input Tax Credit (ITC) available to NRL on each invoice shall be released only upon reflection of corresponding invoice and Input Tax Credit details in GSTR2B report relating to NRL in GST portal. In other words, GST component eligible for Input Tax Credit, of any invoice shall be withheld till such time same is reflected in GSTR-2B.

7.6 The bidder shall comply the requirement of E-invoicing as per notification no 13/2020-CentralTax dated 21.03.2020 and its amendments thereafter.

7.7 Govt. has reduced the aggregate turnover for applicability of E-invoices from earlier limit Rs.20 crores to Rs.10 crores, effective from 1st Oct'2022. Govt. has further reduced the threshold aggregate turnover for applicability of E-invoicing to Rs.5 Crores from 1st August 2023 onwards. In view above, all concerns are requested to raise only E-invoice to NRL with all requisite details like IRN, QR code etc. Non-compliant invoices shall not be accepted for further processing'.

While Processing invoices in LIV Cell of NRL, preference shall be given for processing invoices which are digitally signed and are provided to Bill-desk/LIV-desk of NRL over e- mail in original (i.e. not scanned copy of the digitally signed invoice). Invoices with Class 1 and class 2 digital signature shall be acceptable and shall be given preference over other manually signed hardcopy of invoices for processing payments. This is to ensure faster and more efficient processing of invoices and is a step for achieving complete digitalization in NRL.

Digital Signature Certificate are legally valid in India under Information Technology Act 2000

7.8 While claiming the payment, the supplier must certify on the bill/invoice that the payment being claimed is strictly within terms of the contract/order and all the obligations on his part for claiming this payment have been fulfilled as required under the contract/ order.

7.9 All milestone payments shall be released within 30 days of receipt of Invoice, complete in all respects.

7.10 Documents for Payment for Domestic Goods as applicable:

i) Supplier's Invoice indicating, inter alia description and specification of the goods, quantity, unit price, total value;

ii) Packing list;

iii) Railway receipt/consignment note;

iv) E-Waybill

v) Manufacturer's guarantee certificate and inspection certificate;

vi) Any other document(s) as and if required in terms of the contract.

7.11 Documents for Payment for Imported Goods

i) Supplier's original invoice giving full details of the goods including quantity, value, and so on;

ii) Packing list;

iii) Certificate of country of origin of the goods to be given by the seller or a recognized chamber of commerce or another agency designated by the local Government for this purpose;

iv) Certificate of pre-dispatch inspection by the purchaser's representative;

v) Manufacturer's test certificate and guarantee;

vi) TPI certificates

vii) Certificate of insurance

viii) Bill of lading/airway bill/rail receipt or any other dispatch document, indicating:

a) Name of the vessel/carrier;

b) Bill of lading/airway bill;

c) Port of loading;

d) Date of shipment;

e) Port of discharge and expected date of arrival of goods; and any other document(s) as and if required in terms of the contract.

7.12 The order value shall be exclusive of taxes/duties. 100% payment of taxes/duties shall be paid along with the payment released against dispatch documents on receipt of documentary evidence and fulfillment of conditions mentioned in Annexure-II of SPC.

7.13 All Invoices shall be raised in line with the GST Act/rules in vogue.

7.14 1st Milestone payment shall be released only after receipt of CPS (wherever applicable) and manufacturing schedule.

7.15 Prorata payments shall be applicable on dispatch of equipment. In case of equipment, prorate shall not be on part of equipment.

7.16 In case of Indigenous Suppliers, wherever taxes/duties are separately indicated, the order value shall be exclusive of taxes/duties. 100% payment of taxes/duties shall be paid along with the payment released against dispatch documents on receipt of / vatable documents (wherever applicable).

7.17 Payment to Indigenous Suppliers shall be released through Electronic Clearing System (ECS).

7.18 All bank charges of respective bankers shall be to respective account.

7.19 Certification for placement of sub-order and/or identification of major raw material in the payment terms shall be carried out by TPI agency, as applicable.

8.0 TAXES & DUTIES:

8.1 **Taxes & Duties** shall be as per attached **Annexure– II to SPC**.

8.2 The quoted price shall be deemed to be inclusive of all the taxes and duties except GST (i.e., IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and GST compensation cess, if applicable).

8.3 Transportation charges (as per price schedule) up to respective project site shall be exclusive of GST.

8.4 Site work charges shall be inclusive of all taxes and duties but exclusive of GST. All necessary registrations, if required, for carrying out such activities shall be done by the bidder and costs towards the same shall be included in quoted charges.

8.5 Indian Supplier having built – in Import Content considered in their bid shall also comply with the following provisions:

8.5.1 The supplier shall appoint a Customs House Clearing Agent of good standing and ensure speedy customs clearance.

8.5.2 The supplier shall be responsible to register the Import License with Customs Authorities at the Port of Import, and to answer and sort out technical queries (if any) raised by Customs Authorities in regard to any import(s).

8.6 Consignee details are as under:

Numaligarh Refinery Limited (A Government of India Enterprise)
NRL Complex, Numaligarh, Dist: Golaghat, Assam-785699
Mr. Madhuchanda Adhikari, Head (Project Civil & Petchem)
Email: madhuchanda.adhikari@nrl.co.in
GST No: 18AAACN6984B1Z

8.7 It should be ensured that the imports into India are in conformity with the export- import policy in force: FEMA; FEMA (Current Account Transactions) Rules, 2000; and directions issued by RBI under FEMA from time to time.

8.8 **Compliances for availing Export Promotion of Capital Goods (EPCG) benefit**

NRL may avail EPCG (Export Promotion of Capital Goods) benefits under Foreign Trade Policy (FTP) Chapter-5 in respect of import supplies as well as domestic supplies are available for the subject supply. The import supplies include direct import by the owner or inbuild in the domestic order.

In the event that NRL choses to avail benefits under the EPCG scheme or any other applicable Government scheme that results in a reduced rate of import duty compared to the merit rate, the bidder shall ensure that the corresponding financial benefit is passed on to NRL.

A. Domestic Procurement:

a) The suppliers shall promptly provide the owner with all relevant documents and undertakings as sought by the owner from time to time to apply for EPCG License and its Invalidation Letter. The owner shall apply for EPCG License and its Invalidation Letter with Director General of Foreign Trade (DGFT), and on receipt of EPCG License and Invalidation Letter shall forward a copy to the Supplier for dispatch of the material/supplies.

b) Following are the documents that must be provided by the supplier within one month from the date of issue of purchase order/work order/Letter of Award (whichever earlier) or at least 60 days before dispatch of material from their dispatch location whichever is earlier**:**

i. Pro-forma Invoice – To be prepared by showing Goods and Spare Parts item-wise separately with HSN code, Product Description, Units, UoM & PO reference etc. Product description in the Tax Invoice and Proforma Invoice should be as per the description with tag number given in NRL PO issued to the Supplier of goods. Also note that proforma invoice shall be in line with billing break-up wherever applicable.

ii. Copy of Import Export Code (IEC) and GSTIN of Supplier

iii. Supplier's Jurisdictional Regional Authority address (DGFT Regional Authority Address)

iv. Copy of Supplier's IEM (Industrial Entrepreneur Memorandum) / IL (Industrial License) or Udyam Registration Certificate.

v. Any other document, as may be sought by Owner (NRL) from time to time for applying for EPCG License and/or Invalidation Letter.

c) The supplier shall prepare tax Invoice immediately on dispatch of goods eligible under EPCG scheme with a declaration in the said tax invoice that "This supply is against EPCG authorization number: xxxxx and date: xx/xx/xxxx" having invalidation letter No. xxxx dated xx/xx/xxxx. The supplier's tax invoice should be in line with EPCG License/Invalidation Letter and Proforma Invoice. Any deviation with respect to product description, HSN code, Units or UoM is not acceptable to the owner as well as to DGFT/GST authority.

d) The supplier will have to declare the said supply under deemed export category in its GSTR 1 and GSTR 3B because any supply of goods manufactured in India by a registered person against an EPCG authorization/Invalidation Letter will be qualified as 'deemed export' for the purposes of GST law. [Section 2(39) read with Section 147 of CGST Act & Notification No. 48/2017-Central Tax dated 18 October 2017]. Hence, the supplier will share a copy of GSTR 1 and GSTR 3B declaring that the supply to the owner is under deemed export category.

e) The supplier will have to provide an undertaking to the effect that he has paid the GST charged in the relevant tax invoice and will not be claiming refund of said GST charged in aforesaid tax invoice. The owner will pay GST to the supplier and will claim refund of GST on the deemed export supplies against Invalidation Letter.

f) The supplier keeps in mind that in the absence of above said documents/undertakings, DGFT will not process the owner's EPCG application and therefore the owner will not get EPCG license as well as Invalidation Letter against subject supply. In case, owner is not allowed to avail the benefits so envisaged under EPCG scheme against relevant supplies due to non-receipt of documents/undertaking from the supplier's end, the same shall be passed on to the supplier and adjusted against any amounts payable to the supplier by the owner.

B. Domestic procurement having inbuilt import supply therein:

For Domestic procurement having inbuilt import supply, supplier shall be required to comply with following in addition to the requirement stated in Para A above.

Where domestic supply contains import items and inbuilt in the domestic supply order, in such cases the domestic supplier shall obtain Advance Authorisation License from its jurisdictional DGFT and import the capital goods against said advance authorisation at concessional / zero customs duty OR the domestic supplier has to claim duty draw back and pass on the benefit to owner. Any supply to the owner against EPCG License/Invalidation Letter is considered as deemed export under foreign trade policy as well as under GST Law.

9.0 TAX DEDUCTION AT SOURCE

9.1 Purchaser will release the payment to the Seller after effecting deductions as per applicable law in force.

9.2 Purchaser will release payments to the seller after offsetting all dues to the Purchaser payable by the seller under the Contract.

10.0 BREACH OF CONTRACT, REMEDIES AND TERMINATION

In case the contractor is unable to honour important stipulations of the contract, or gives notice of his intention of not honouring or his inability to honour such a stipulation, a breach of contract is said to have occurred. Mostly, such breaches occur in relation to the performance of the contract in terms of

inability to supply the required quantity or quality or within stipulated time. It could also be due to breach of ethical standards or any other stipulation that affects Procuring Entity seriously.

As soon as a breach of contract is noticed, a show cause notice should be issued to the contractor reserving the right to implement contractual remedies. If there is an unsatisfactory resolution, remedial action may be taken immediately. The CA may terminate a contract in the following cases.

10.1 Cancellation of Contract for Default

Without prejudice to any other remedy for breach of contract, such as removal from the list of registered supplier, by written notice of default sent to the supplier, the contract may be terminated in whole or in part:

i) If the supplier fails to deliver any or all of the stores within the time period(s) specified in the contract, or any extension thereof granted; and
ii) If the supplier fails to perform any other obligation under the contract within the period specified in the contract or any extension thereof granted;
iii) If the contract is terminated in whole or in part, recourse may be taken to any one or more of the following actions:

a) Forfeiture of the EMD;
b) Upon such terms and in such manner as it deems appropriate, goods similar to those undelivered may be procured and the supplier shall be liable for all available actions against him, as applicable in terms of the contract (including risk purchase); and
c) However, the supplier shall continue to fulfil the contract to the extent not terminated.

Before cancelling the contract and taking further action, it may be desirable to obtain legal advice.

10.2 Termination of Contract for Insolvency

If the supplier becomes bankrupt or becomes otherwise insolvent or undergoes liquidation or loses substantially the technical or financial capability (based on which he was selected for award of contract), at any time, the contract may be terminated, by giving a written notice to the supplier, without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to Procuring Entity.

10.3 Termination of Contract for Convenience

After placement of the contract, there may be an unforeseen situation compelling Procuring Entity to cancel the contract. In such a case, a suitable notice has to be sent to the supplier for cancellation of the contract, in whole or in part, for its (Procuring Entity's) convenience, inter alia, indicating the date with effect from which the termination will become effective. This is not Procuring Entity's legal right- the contractor has to be persuaded to acquiesce. Depending on the merits of the case, the supplier may have to be suitably compensated on mutually agreed terms for terminating the contract. Suitable provisions to this effect should be incorporated in the tender document as well as in the resultant contract.

11.0 GUARANTEE /WARRANTY PERIOD

11.1 Guarantee /Warranty Period shall be applicable as per clause no. 10 of General Purchase Condition (Indigenous) & General Purchase Condition (Import).

12.0 INSURANCE

12.1 NRL shall take comprehensive marine-cum-erection all risk policy (MCEAR) for the project. Transit Insurance from FOT dispatch point to NRL Refinery Site shall be in NRL's scope. However, supplier shall intimate dispatch details and value of goods in advance to NRL for transit insurance coverage.

13.0 TESTING AND INSPECTION:

In partial modification to applicable provisions of GPC:

13.1 Goods and Services shall be subject to stage wise and final inspection by Third Party Inspection (TPI) agency. The TPI charges shall be included in quoted prices, and no additional charges shall be paid by Owner.

13.2 Similarly, all built in import content (if applicable) shall also be subject to inspection by TPI agencies, in the country of origin of the import content, and charges for the same are included in quoted prices, and no additional charges shall be paid by Owner.

13.3 Inspection of Goods at manufacturer's works within India and raw materials/components sourced within India shall be carried out by NRL approved Third Party Inspection Agency. However, wherever Inspection by Consultant is specified as per approved Inspection Test Plan (ITP) enclosed with Material Requisition (MR)/ Purchase Requisition (PR), the same shall be carried out by Consultant without any additional cost to supplier.

13.4 All Foreign sourced materials shall be inspected by approved Third Party Inspection Agencies. Inspection charges for the same shall be borne by the bidders and shall be included in their quoted price.

13.5 Inspection of all bought out items shall be subject to pre- dispatch inspection from any of the approved TPI Agencies and shall be arranged by the bidder at his own cost.

13.6 Name of NRL approved TPI Agencies are as under:

TPI Agencies for Indian Supplies:	***TPI Agencies for Foreign Supplies:***
i. M/s SGS India Pvt Ltd ii. M/s TUV SUD South Asia Pvt Ltd iii. M/s Bureau Veritas India Pvt Ltd iv. M/s TUV India Pvt Ltd v. M/s Certification Engineers International Ltd vi. M/s Irclass Systems and Solutions Pvt Ltd. vii. M/s Lloyd's Register Marine and Inspection Services India Ltd. ~~viii. M/S TUV Rheinland (India) Pvt Ltd.~~ ix. M/S VCS Quality Services Pvt Ltd. x. M/s Engineers India Limited (EIL)	i. M/s SGS ii. M/s TUV iii. M/s BVQI iv. M/s DNV v. M/s Lloyd's Register International vi. M/s Engineers India Limited (EIL)

13.7 It will be bidder's responsibility to arrange for third party inspection (if applicable) and submit third party inspection release note on time. No time extension shall be allowed by NRL for any delay/lapse in this regard**.**

13.8 Any materials/ goods covered under scope of supply, which during the process of inspection by Purchaser/ appointed third party, at any stage prior to dispatch, is found not conforming to the requirements/ specifications of the Purchase Requisition/ Purchase Order and shall be liable for immediate rejection.

13.9 Seller shall be responsible and liable for immediate replacement of such material with acceptable material at no extra cost or impact on the delivery schedule to Purchaser.

14.0 CONTRACT PERFORMANCE SECURITY (CPS) AND WARRANTY BANK GUARANTEE (WBG)

14.1 For applicability of CPS & WBG, Bidder to refer Bid Data Sheet (BDS).

14.2 Contract Performance Security (CPS), if applicable shall be as per clause no. Clause no. 29(A) of General Purchase Condition (Indigenous) & Clause no. 4(A) of General Purchase Condition (Import).

14.3 Warranty Bank Guarantee (WBG), if applicable shall be as per clause no. Clause no. 29 of General Purchase Condition (Indigenous) & Clause no. 4 of General Purchase Condition (Import).

14.4 CPS shall be submitted by the Seller (including MSEs, Public Sector Undertakings and other Government bodies) within 30 days from the date of LOA, for order values above INR 10 lakhs.

14.5 Total Order value (TOV) shall mean supply price including mandatory spares, packing and forwarding charges/ TPI charges (FOT dispatch point price for Indian bidder) plus site work (wherever applicable) but excluding GST, transportation, Training services, PWAMC and Supervision services.

14.6 Bank Guarantee towards CPS and WBG shall be from any Indian scheduled bank (except Cooperative & Gramin Banks) or a branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in case of Indian bidder. However, in case of bank guarantees from banks other than the Nationalized Indian banks, the bank must be a commercial bank having net worth in excess of Rs. 100 crores or its equivalent in U.S. Dollars) and a declaration to this effect should be made by such commercial bank either in the Bank Guarantee itself or separately on its letterhead.

14.7 It will be the responsibility of the Seller to keep the Bank Guarantee fully subscribed. Any shortfall in the value of the Bank Guarantee as a result of encashment by the Owner either in full or in part in terms of Seller's Performance shall be replenished by the Seller within two weeks thereof.

14.8 Failure of the successful Bidder to comply with the requirements of this article shall constitute sufficient grounds for the annulment of the LOA/PO and forfeiture of the Earnest Money Deposit (EMD), if any.

14.9 Wherever supervision is included in the scope specified in the MR/PR, supplier shall provide additional BG for an amount equal to the per diem charges for the number of days considered for evaluation over and above CPS, to cover compensation for delay in mobilizing the erection/commissioning personnel. This BG will be released to the supplier upon the erection/ commissioning personnel reporting at site. This BG shall be furnished along with last milestone payment of supply and shall be valid up to six months which shall be extended based on the request by NRL.

14.10 Wherever site work is included in the scope specified in the MR/PR and Guarantee/Warrantee period is expired due to delay in handing over of front or any other reason, supplier shall provide additional BG for an amount equal to the last milestone payment of site work. This BG shall be valid for defect liability period of 12 months from the date of handing over of duly erected/commissioned (as applicable) equipment/package plus claim period.

14.11 In case of package contract where scope of the purchase order (PO) also involves Post Warrantee Annual Maintenance Contract (PWAMC), Within 2 weeks of placement of Order for AMC, Seller shall submit BG for 10% of the Maximum annual AMC amount which shall be valid for the entire AMC period plus 2 months claim period.

14.12 BG shall be as per the prescribed formats. The BG contains the name, designation and code number of the Bank officer(s) signing the guarantee(s).The address and other details (including telephone no.) of the controlling officer of the bank are obtained from the branch of the bank issuing the BG (this should be included in all BGs.

14.13 In addition to the modes of submission of CPS mentioned above, Vendor/Contractor can also submit CPS in the form of Insurance Surety Bond (ISB) from a Surety Insurer acceptable to the owner, as per guidelines issued by IRDAI in format enclosed with the tender document and in which case, the aforementioned provisions of this Clause 14 shall apply mutatis mutandis.

14.14 **Delay or Non-submission of CPS within stipulated period:**

In case of non-submission of **CPS** within the period stipulated, required **CPS** amount along with interest for the delayed period shall be recovered from the first RA bill / first Milestone payment, onwards, on proportionate basis, till full recovery.

However, in case, if the supplier submits **CPS** before the first RA bill/ first Milestone payment, then interest shall be recovered from the first RA bill/ first Milestone payment, for the delayed period beyond the period stipulated for **CPS**.

For the purpose of above mentioned, interest rate shall be @ **SBI MCLR + 1%** as on date of issuance of enquiry.

In case of non-submission of **CPS** within one month beyond the period stipulated for it, coupled with non-mobilization / non-performance within the period stipulated for the same, the Termination action along with other contractual penal provisions may be initiated, as per the contract provisions.

In case of occurrence of any of the above specified events, contractor shall be understood to have defaulted and NRL shall have the right to terminate the contract, at its sole and absolute discretion by issuing a Show Cause notice of 10 calendar days to the Contractor/Vendor/supplier, stating the reason and the intention of NRL to terminate the Contract and to take other penal actions in terms of the contract including extant policy for Holiday listing/ Banning/ Debarring of Contractors/ Suppliers of Owner.

15.0 DELAYED DELIVERY

Provisions of Clause 15 of GPC (Indigenous) and Clause 5 of GPC (Imports) stands modified to the following extent:

15.1 The delivery period quoted/ agreed shall be strictly followed. Failing supplies in time, NRL reserves the right to cancel the order and take alternative procurement action solely at the risk and cost of the supplier.

15.2 In case of delay in execution of the order, NRL may at its option, recover from the supplier price reduction of 0.5% of the value of delayed goods per week of delay or part thereof subject to a maximum of 5% of the total order value (TOV) of goods.

15.3 However, wherever MR/PR contains packages/ equipment/Site work, delay for delivery shall be applicable for total order value (i.e., half percent (1/2%) of the Total Order Value (TOV) for every week of delay or part thereof, limited to a maximum of Five percent (5%) of the Total Order Value (TOV).

15.4 Wherever the supply period and site work are indicated as two separate periods and notice of site readiness is required to be provided for site work, intervening period, if any, shall be excluded, while calculating the price reduction for delay.

15.5 The invoice shall be raised after equivalent reduction in the Invoice value before presenting to Purchaser/ Bank for payment. The acceptance of delayed delivery is without prejudice to Purchaser's right of cancelling the purchase order wholly or in part for any delay exceeding the period of maximum price reduction and the Seller shall be liable for all consequences thereof.

15.6 Total Order value shall mean supply price including mandatory spares, packing and forwarding

charges/ TPI charges (FOT dispatch point price for Indian bidder) plus site work (wherever applicable) but excluding GST, transportation, Training services, PWAMC and supervision services.

15.7 Where erection/commissioning supervision, commissioning assistance is required from the supplier, penalty for non-mobilization/delay in mobilization as per order shall be 1.5 times the per diem rate for each day of delay of reporting to site and shall be in addition to price reduction for delayed delivery.

16.0 FORCE MAJEURE:

Clause no. 31 of General Purchase Condition (Indigenous) & Clause no. 6 of General Purchase Condition (Import) last paragraph is modified to the following extent:

Force Majeure (FM) clause in the contract frees both parties from contractual liability or obligation when prevented by such events from fulfilling their obligations under the contract. An FM clause does not excuse a party's non-performance entirely, but only suspends it for the duration of the FM. The firm has to give notice of FM as soon as possible and it cannot be claimed ex- post facto.

There may be a FM situation affecting the purchase organisation only. In such a situation, the purchase organisation is to communicate with the supplier along similar lines as above for further necessary action. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of FM for a period exceeding 90 (ninety) days, either party may at its option terminate the contract without any financial repercussion on either side. Any delays in or failure of the performance of either party hereto shall not constitute default hereunder or give rise to any claims for damages, if any, to the extent such delays or failure of performance is caused by force majeure.

Force Majeure Events Exceeding 90 Days: If an event or series of events (alone or in combination) of Force Majeure occur and continue for a period in excess of 90 consecutive days then NRL shall have the right to terminate this agreement, whereupon the Parties shall meet to mitigate the Impediments caused by the Force Majeure event.

17.0 TRANSFER OF PROPERTY FROM THE SELLER TO THE PURCHASER

17.1 The transfer of property shall be deemed to have taken place as follows subject to the provisions herein contained:

a) FOT/FOR Dispatch point: The title of Ownership shall at all times remain with the Owner after dispatch.
b) FOT/FOR/DAP Project Site: The title of Ownership shall at all times remain with the Owner after dispatch.
c) Equipment sent freight/ carriage paid to the Refinery site: On receipt of goods at site.
d) Equipment erected by the Seller: On acceptance at job site.
e) Equipment commissioned by the Seller: On taking over by the Purchaser for regular operation after test run at maximum capacity for specified period satisfactorily performed.

The delivery basis shall be as per RFQ Document/BDS.

18.0 GOVERNING LAW

18.1 Laws of India will govern the Contract / Purchase Order and jurisdictions of the courts in the city of Golaghat or Guwahati will have exclusive jurisdiction on all matters related to Contract / Purchase Order.

19.0 FRAUDULENT PRACTICES

19.1 NRL requires that Bidders/ Vendors/ Suppliers observe the highest standard of ethics during the award/ execution of Purchase Order. "Fraudulent Practice" means a misrepresentation of facts in order to influence the award of a Contract/Purchase Order to the detriment of the NRL, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices

at artificial non- competitive levels and to deprive the NRL of the benefits of free and open competition.

19.2 NRL will reject a proposal for award if it determines that the bidder recommended for award has engaged in fraudulent practices in competing for the Contract in question.

19.3 Bidder is required to furnish the complete and correct information/ documents required for evaluation of their bids. If the information/ documents forming basis of evaluation is found to be false/ forged, the same shall be considered adequate ground for rejection of bids and forfeiture of EMD/Bid Security, if any.

19.4 In case, the information/ document furnished by the Bidder/ Vendor/ Supplier forming basis of evaluation of his bid is found to be false/ forged after the award of the contract, NRL shall have full right to terminate the Contract/ Purchase Order and get the remaining job executed at the risk & cost of such Bidder/ Vendor/ Supplier without any prejudice to other rights available to NRL under the contract such as forfeiture of CPS/ Security Deposit, withholding of payment etc.

19.5 In case, this issue of submission of false documents comes to the notice after execution of supply/work, NRL shall have full right to forfeit any amount due to the Bidder/ Vendor/Supplier along with forfeiture of CPS furnished by the Bidder/Vendor/ Supplier.

19.6 Further, such bidder/ vendor/ Supplier shall be put on Suspension / Banning List /Blacklist/ Holiday/ Negative List of NRL/ Consultant debarring them from future business with NRL for a time period, as per the prevailing policy in NRL.

20.0 INDEPENDENT SELLER

20.1 It is expressly understood and agreed that Seller is an independent party and that neither the Seller/ its personnel are servants, agents or employees of Purchaser/ Consultant nor the Seller has any kind of interest in other sellers.

21.0 LIEN

21.1 Seller shall ensure that the Scope of Supply under the Contract shall be free from any claims of title/liens from any third party. In the event of such claims by any party, Seller shall at his own cost defend, indemnify and hold harmless Purchaser or its authorized representative from such disputes of title /liens, costs, consequences etc.

22.0 PART ORDER

Part Order shall be as per the provision of General Purchase Conditions. Further, Bidder hereby agrees that items may be split (wherever applicable) to meet the Public Procurement Policy, 2012 for MSEs (Micro & Small Enterprise) or Public Procurement (Preference to Make in India) (PPP-MII), issued by Govt. of India.

23.0 GOVERNMENT OF INDIA NOT LIABLE

It is expressly understood and agreed by and between the Supplier and the NRL that the NRL is entering into this Contract solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that the Government of India is not a party to this agreement and has no liabilities, obligations or rights there under. It is expressly understood and agreed that the NRL is an independent legal entity with power and authority to enter into contract, solely in its own behalf under the applicable laws of India and general principal of Contract Law. The Supplier expressly agrees, acknowledges and understands that the NRL is not an agent, representative or delegate of Govt. of India. It is further understood and agreed that the Govt. of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the contract. Accordingly, Supplier hereby expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Govt. of India arising out of this contract and covenants not to sue to Govt. of India as to any manner, claim,

cause of action or thing whatsoever arising of or under this Contract.

24.0 LIMITATION OF LIABILITY:

Clause No. 34 of GPC (Indigenous) and Clause No. 30 of GPC (Imports) stands replaced as under:

24.1 The aggregate liability of the supplier to NRL under the Contract shall be the total Contract Price, except that this Clause shall not limit the liability of the Supplier for following:

i. Any liability pursuant to supplier's breach of any Applicable Law;
ii. any loss resulting from fraud, intentional or willful misconduct or illegal or unlawful acts, or gross negligence or omissions of the supplier or its affiliates or any sub-vendor or any supplier or any of its or their respective officers, directors, employees, servants or agents or any other person acting on behalf of the Supplier; or
iii. any liability to rectify, repair, restore or replace any materials and/or works or deficiencies therein in terms of the Contract; or
iv. In the event of any claim or loss or damage arising out of infringement of Intellectual Property; or
v. For any damage to any third party, including death or injury of any third party caused by the supplier or any person or firm acting on behalf of the supplier in executing the order; or
vi. Any liability pursuant to supplier's indemnity obligations under the Contract; or
vii. Supplier's liability for Price adjustment for utility consumption beyond the Guaranteed Values as per Tender Documents

AND provided always that such limitation shall exclude any amounts recovered under any policy(ies) of insurance taken out and/or maintained by the Supplier pursuant to the provisions of the Contract/Purchase Order.

24.2 Neither Party shall be liable to the other Party for any kind of indirect or consequential loss or damage including, loss of use, loss of profit, loss of production or business interruption which is connected with any claim arising under the Contract/Purchase Order.

25.0 SINGLE POINT RESPONSIBILITY OF THE SUPPLIER:

25.1 In case of indigenous Purchase Order containing supplies as well site work/ services, a single order, covering the supply part as well site work/ services, shall be placed.

26.0 REQUIREMENT OF EMPLOYMENT VISA FOR FOREIGN NATIONALS COMING TO INDIA

FOR EXECUTION OF PROJECTS:

26.1 All Foreign nationals coming to India for execution of Projects / Contracts will have to apply for Employment Visa only and that grant of Employment visa would be subject to strict adherence of following norms:

26.1.1 Employment visa is granted only for the skilled and qualified professionals or to a person who is being engaged or appointed by a Company, Organization, Industry or Undertaking etc. in India on contract or employment basis at a senior level, skilled position such as technical expert, senior executive or in managerial position etc.

26.1.2 Request for employment visa for Jobs for which large number of qualified Indians are available, is not considered.

26.1.3 Under no circumstances an Employment visa is granted for routine, ordinary secretarial / clerical jobs.

26.1.4 Bidders are advised in their own interest to check latest Visa rules from Indian Embassy/ High Commission in their country in case foreign nationals are required to be deputed to India during

execution of contract.

27.0 POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY (INDIAN) MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT (DMI &SP) (as applicable):

Supplier shall mandatorily comply with the provisions under DMI & SP policy as enclosed with the ITB. refer **Appendix – IV to Instructions to Bidders (ITB).** Refer Bid Data Sheet for applicability of DMI & SP Policy.

28.0 PUBLIC PROCUREMENT (PREFERNCE TO MAKE IN INDIA) (as applicable):

28.1 For detailed guidelines, refer **Appendix – III to Instructions to Bidders (ITB).** Refer Bid Data Sheet for applicability of PPP-MII Policy.

29.0 TERMS & CONDITIONS FOR POST WARRANTY ANNUAL MAINTENANCE CONTRACT (PWAMC) (as applicable):

29.1 If Post Warranty Annual Maintenance Contract is applicable as per Technical Section of Bidding Document, the Terms & Conditions shall be as per **Annexure–III to SPC**.

30.0 TERMS & CONDITIONS FOR SUPERVISION OF ERECTION, TESTING & COMMISSIONING / TRAINING AT SITE (as applicable):

30.1 Terms & conditions for supervision of erection, testing & commissioning / training at site shall be as per attached **Annexure-V to SPC.**

31.0 TERMS & CONDITIONS FOR INSTALLATION/ SITE WORK (as applicable):

31.1 Terms & conditions for installation/ site work shall be as per attached **Annexure-VI to SPC.**

32.0 TERMS & CONDITIONS FOR SITE FABRICATION (as applicable):

32.1 Terms & conditions for site fabrication shall be as per **Annexure-VIA to SPC**.

33.0 TERMS & CONDITIONS FOR TRAINING OF OWNER PERSONNEL AS PER MR/PR AT VENDOR'S WORKS/ TRAINING FACILITY (as applicable):

33.1 Terms & conditions for training of owner personnel as per MR/PR at vendor's works/ training facility shall be as per attached **Annexure-VII to SPC.**

34.0 PACKING, MARKING, SHIPPING AND DOCUMENTATION- INDIGENOUS AND IMPORTED MATERIALS (as applicable)

34.1 Specifications for Packing, Marking, Shipping and Documentation applicable for Indigenous & Imported Materials are attached as **Annexure-VIII to SPC**.

35.0 BIDDER'S RIGHT TO QUESTION REJECTION:

A tenderer shall have the right to be heard in case he feels that a proper procurement process is not being followed and/or his tender has been rejected wrongly. The tenderer is to be permitted to send his representation in writing. Only a directly affected bidder can represent in this regard:

i. Only a bidder who has participated in the concerned procurement process i.e. prequalification, bidder registration or bidding, as the case may be, can make such representation.

ii. In case pre-qualification bid has been evaluated before the bidding of Technical/ financial bids, an application for review in relation to the technical/ financial bid may be filed only by a bidder who has qualified in pre-qualification bid.

iii. In case techno-commercial bid has been evaluated before the opening of the financial bid, an application for review in relation to the financial bid may be filed only by a bidder whose technical bid is found to be acceptable.

iv. Following decisions of the procuring entity in accordance with the provision of internal guidelines shall not be subject to review:

a) Determination of the need for procurement;
b) Selection of the mode of procurement or bidding system;
c) Choice of selection procedure;
d) Provisions limiting participation of bidders in the procurement process;
e) The decision to enter into negotiations with the L1 bidder;
f) Cancellation of the procurement process except where it is intended to subsequently re-tender the same requirements;
g) Issues related to ambiguity in contract terms may not be taken up after a contract has been signed, all such issues should be highlighted before consummation of the contract by the vendor; and
h) Complaints against specifications except under the premise that they are either vague or too specific so as to limit competition.

	PAYMENT TERMS
A.	**FOR INDIGENOUS SUPPLIERS:**
1.	**Supply:**
1.1.	• 5% against approval of drawings, wherever required (identified in PO/ PR) at least in Code-2 and against submission of ABG of equivalent amount. • 15% against identification of raw materials at Supplier's works and against submission of ABG of equivalent amount. • 55% (60% where drawing/doc approval not required) against despatch documents (along with copy of LR/GR and IRN) together with full taxes, duties and transportation charges. • 10% against receipt of material at site. • 5% on receipt of all Final/As built Drawings/Documents/Data/Manual in requisite number of copies/sets/CDs as per VDR specified in Purchase Requisition. • 10% on receipt of all material at site and alongwith tax deposit and returned filed as per GST rules. Bidders payment are subject to TDS, TCS as per applicable Act of Govt.

	NOTES TO PAYMENT TERMS: i. 1ST Milestone payment shall be released only after receipt of CPBG (wherever applicable) and manufacturing schedule (in template available on eDMS portal) ii. Prorata payments shall be applicable on dispatch of equipment. In case of equipment, prorate shall not be on part of equipment. iii. In case of indigenous SUPPLIERs, wherever taxes/duties are separately indicated, the order value shall be exclusive of taxes/duties. 100% payment of taxes/duties shall be paid along with the payment released against dispatch documents on receipt of / vattable documents (wherever applicable). iv. Payment to indigenous SUPPLIERs shall be released through Electronic Clearing System (ECS). v. ~~Irrevocable Standby Letter of credit shall be acceptable from foreign Suppliers in place of Advance Bank Guarantee as well as Contract cum Performance Bank Guarantee.~~ vi. ~~Irrevocable Letter of Credit for payment to Foreign SUPPLIERs shall be established in favour of the supplier in a bank in his country, for an appropriate amount (in line with Payment Terms). L/C shall be opened within 45 days of receipt of acknowledgement of FOA/PO and receipt of CPBG (wherever applicable). In case confirmed L/C is insisted by supplier, L/C confirmation charges shall be to supplier's account.~~ vii. All payments shall be released within 30 days of receipt of invoice and all requisite documents, complete in all respects. viii. All bank charges of respective bankers shall be to respective account.

	ix. Supplier shall submit Billing Schedule within three weeks after placement of LOA/PO (whichever is issued earlier) for Consultant /OWNER's approval (wherever applicable). Suppliers requiring multiple despatches will restrict the number of despatches to maximum three, unless agreed otherwise by Project Manager. x. ~~In case of Annual Maintenance Contract (PWAMC), CPBG @ 10% of maximum annual PWAMC amount shall be submitted within 2 weeks from the date of order and shall be valid for the entire PWAMC period plus 3 months claim period.~~ xi. In case of Columns/Vessels/Reactors where Template to be supplied by Supplier, 15% payment against raw material identification shall be split in 1%+14% and it shall be specified that 1% payment out of 15% shall be paid after receipt of templates at site. Supplier has to ensure supply of templates within two months from the approval of drawings at least in code. xii. Certification for placement of sub-order and/or identification of major raw material, in the above payment terms, shall be carried out by Consultant/TPI agency, as applicable. ~~xiii. In enquiry for Supply plus Site Work, where front for site work is not available up to 3 (Three) months after receipt of all supplies at site, the withheld amount of supply shall be released subject to submission of a BG of equivalent amount valid initially for one year and extended further, as applicable.~~

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A. PRICE BASIS W.R.T INCLUSION/EXCLUSION OF TAXES AND DUTIES

1. The quoted price(s) shall be inclusive of all the taxes and duties except GST (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively) and GST compensation cess, (if applicable) leviable on sale of finished goods/services.
2. In case of foreign bidders, bidders shall submit their prices on FOB international sea port of exit basis/CFR on destination port basis (INCOTERM 2020), unless otherwise stated in the bid document. FOB/CFR prices quoted shall be inclusive of all applicable taxes up to FOB international sea port of exit/CFR on destination port basis.
3. Transportation charges (if applicable) up to respective project site shall be exclusive of GST.
4. Site work prices, if applicable shall be inclusive of all taxes and duties except GST. All necessary registrations, if required, for carrying out the site activities shall be done by the bidder and costs towards the same shall be included in quoted site work prices.
5. Prices of per diem supervision charges, training/AMC, HAZOP Study etc. (as applicable) shall be exclusive of GST. However, GST shall not be applicable on training provided at foreign bidder's work/training facilities in any territory other than India.

B. TAX CLAUSES

1. GOODS AND SERVICES TAX

a. The supplier/contractor will be liable to register with the respective tax authorities and to submit self-attested copy of such registration certificates and the supplier/contractor will be responsible for procurement of goods/services in its own registration (GSTN).

b. Supplier/Contractor shall be required to issue tax invoice in the form and manner prescribed under GST Act read with Rules thereunder including E-Invoicing provisions so that input tax credit under GST can be availed by Owner. In the event that the supplier/contractor fails to provide the Tax Invoice/E-Invoice in the form and manner prescribed under the GST act read with GST invoicing rules thereunder, Owner shall not be liable to make any payment on account of GST against such invoice.

c. In case supplier/contractor is not subject to E-Invoicing provisions under the GST Laws as amended from time to time, then a declaration to this effect shall be furnished by the supplier/contractor along with the Invoice.

d. GST shall be paid to supplier/contractor against receipt of Tax Invoice/E-Invoice and on auto-population of input tax credit on GSTN portal. In case of non-receipt of Tax Invoice/E-Invoice and/or non-auto-population of input tax credit on GSTN portal, Owner shall with hold the payment of GST.

e. The supplier/contractor shall always comply with the requirements of applicable laws and provide necessary documents as prescribed under the rules and regulations, as applicable from time to time. In particular, if any tax credit, refund or any other benefit Is denied/delayed to Owner or any interest/penalty is charged to Owner due to any non-compliance/ delayed

compliance by the supplier/contractor under the GST Law (including but not limited to failure to upload the details of the sale on GSTN portal, failure to pay GST to the government or due to non-furnishing or furnishing of incorrect or incomplete documents, non-filing of GST return by the supplier/contractor), the supplier/contractor shall be liable to reimburse Owner for all such losses and other consequences including but not limited to the tax loss, interest and penalty. Owner shall be entitled to recover such amount from the supplier/contractor by way of adjustment from the next invoice, encashment of BG or by way of any other means either of same project or any other project of the Owner.

f. In case of any Advance including Mobilization/Secured/Other Advance is granted to supplier/contractor as per the provisions of Contract, then the supplier/contractor shall issue a Receipt Voucher / GST Invoice in the form and manner prescribed under GST Act read with Rules thereunder including e-invoicing provisions.

g. In case of any Price Variation as per the provisions of Contract, the supplier/contractor shall issue an Invoice in the form and manner prescribed under the GST Act read with Rules thereunder including e-invoicing provisions.

h. GST payable under reverse charge for specified services/goods under GST Act read with Rules thereunder, if any, shall not be paid to the supplier/contractor but will be directly deposited by Owner to the appropriate Government Tax Authority. If the same has already been reimbursed / paid to the supplier/contractor for any reason whatsoever, then Owner shall be entitled to deduct/set off /recover such amount against any amounts paid/payable by Owner to supplier/contractor.

i. Where Owner has the obligation to discharge GST liability under reverse charge mechanism and Owner has paid or is liable to pay GST to the government on which interest/penalty becomes payable as per GST law for any reason which is not attributable to Owner or Input Tax Credit w.r.t. such payment is not available to Owner for any reason which is not attributable to Owner, then Owner shall be entitled to deduct/set off /recover such amount against any amounts paid/payable by Owner to contractor/supplier.

j. TDS under GST, if applicable shall be deducted from supplier/contractor bills at applicable rates and a certificate as per rules for tax so deducted shall be provided to supplier/contractor.

k. The supplier/contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the supplier/contractor shall avail and pass on benefits of all exemptions/concessions available under applicable tax laws.

l. In case bidder is covered under composition scheme under GST law, then bidder shall quote the price inclusive of GST. Further, such bidder should mention “Covered under GST Composition Scheme” in column for GST of relevant price schedule(s). In case subsequently such bidder gets covered under regular GST regime, the prices including GST under regular GST regime shall not exceed the prices quoted by the bidder under composition scheme.

m. Owner prefers to deal with registered supplier/contractor of goods/services under GST. Therefore, bidders are requested to get themselves registered under GST, If not registered yet. However, in case any unregistered bidder is submitting bid, their prices will be loaded with applicable GST while evaluation of bid as per evaluation methodology of tender document. However, where Owner is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

n. In case of foreign bidders, for supervision/site-work/training, services provided by foreign bidder at project site, GST shall be paid by Owner directly to appropriate Government Tax Authorities, under Reverse Charge Mechanism, if applicable and prices of such services will be loaded with applicable GST while evaluation of bid as per clause E (Evaluation methodology).

o. Bidder will be required to quote applicable tax rate (along with applicable HSN/SAC Code) as per provisions of GST Laws for all the line items forming part of the enquiry. Any higher rate of tax actually invoiced in excess of quoted rate of tax (except in compliance with provisions of Statutory Variation clauses) shall be adjusted in basic price.

p. In case of delay in supply/execution of contract, supplier/contractor shall be liable to raise invoices for reduced value as per Price Reduction Schedule (PRS) provision of the bidding document. In case the supplier/contractor raises invoices for full value, then supplier/contractor shall issue Credit Note, in the form and manner prescribed under relevant GST Act read with Rules thereunder, towards applicable PRS amount with applicable GST thereon.

In case supplier/contractor fails to submit invoices with reduced value or does not issue Credit Note as mentioned above, Owner shall release payment to the supplier/contractor after giving effect to the PRS clause with corresponding reduction in taxes from invoice(s) of supplier/contractor.

In case any financial implication arises on Owner due to issuance of invoice without reduction in prices or non-issuance of Credit Note by supplier/contractor, the same shall be to the account of supplier/contractor. Owner shall be entitled to recover the amount of such financial implication paid or becoming payable by Owner together with penalty and interest thereon, if any.

q. E-way bills shall be issued directly by supplier/contractor in all cases except in cases of direct imports by Owner where E-way bill shall be issued by Owner.

r. In case of applicability of any recovery as per provisions of the contract, Owner shall raise Invoice on supplier/contractor after charging GST at applicable rates as per prevailing provisions of GST Laws.

2. IMPORT DUTIES

a. Direct supplies by foreign suppliers where, client becomes consignee:

i. Consignee shall be Owner, bill of entry shall be filed by Owner, all import duties, Social Welfare Surcharge, IGST and GST Compensation Cess etc. as applicable in India shall be paid by Owner.

b. Imported supplies by Indian suppliers as built in import content where Suppliers/Contractors will become consignee of the goods or by filling Bill of Entry for Home consumption

i. Custom duties, Social Welfare Surcharge, IGST, GST Compensation Cess, etc. as applicable in India on the imported materials shall be included in the quoted prices by the bidder (considering the input tax credit of IGST, GST Compensation Cess on imported material) and supplier/contractor shall be responsible for the timely payment of the custom duties to the relevant government authority. All harbor dues/ pilotage fees, port fees, wharfage, unloading costs, demurrage charges etc. incurred in India in respect of any imported goods shall be to supplier's/contractor's account.

ii. Bidder to indicate, in relevant price schedule, CIF value of built-in import content and applicable merit rate of custom duty, Social Welfare Surcharge on custom duty (considering the input tax credit of IGST, GST Compensation Cess on imported material) included in quoted price, in the price schedule.

iii. In case merit rate of custom duty is applicable and bids are invited on the basis of same, however at a later stage concessional rate of custom duty becomes applicable, concessional certificate shall be issued towards import of material against the advance request letter submitted by the domestic bidder and the differential custom duties between concessional rate and quoted merit rate of custom duty by supplier/contractor shall be passed on to the Owner or it shall be recovered by the Owner from the supplier/contractor's invoice.

iv. The supplier/contractor shall be responsible for and shall exercise due diligence in properly classifying the goods and materials, undertaking the payment of custom duties, and/or otherwise complying with all applicable laws w.r.t. import of the goods and materials.

v. If bidder does not furnish built in CIF value and rates of custom duty, in that case bidder shall not be entitled to claim any variation in the custom duties even if bidder has quoted their prices considering custom duties.

vi. If custom duty rate actually paid on import of materials and components is found to be lower than the quoted rate of custom duty, then benefit of the same shall be passed on to the Owner.

vii. If bidder has considered Import Duty other than Merit rate of Import Duty then statutory variation on the Import Duty shall be payable extra on the Merit rate of Import Duty or the rate of Import Duty considered by the bidder, whichever is lower.

viii. In case, no import is made for execution of the order, clauses related to Imports will not be applicable.

c. General points:

i. In case Owner is exposed to any penal action, interest /penalties by the custom authorities for incorrect declaration and / or valuation of the goods or material by the supplier/contractor, or otherwise on account of any breach of applicable laws in the course of the import of the goods and material by supplier/contractor, the supplier/contractor shall indemnify and hold harmless the Owner for any and all costs, expenses or losses suffered or incurred by Owner in this regard

ii. If bidder intends to source import of goods from a country with which India has Free Trade Agreement (FTA) or Comprehensive Economic Partnership Agreement (CEPA) or any such

multi-lateral / bi-lateral Agreement or Treaty with India or under Generalized System of Preference (GSP); or under any other notification (allowing lower rate of custom duty), then the bidder is advised to ascertain and confirm its applicability along with supporting documents in the bid and ensure that conditions of such agreement/treaty etc. are strictly complied with.

iii. The bidder shall be liable to provide all documentation to ensure availment of the exemption/waiver. In case the bidder defaults on this due to any reason, whatsoever, he shall be liable to bear the incremental custom duty applicable if any

iv. Any additional custom duty applicability on account of any change in the notification (allowing lower rate of custom duty)/ CEPA/FTA/multi-lateral/bi-lateral trade agreement shall be to bidder's account.

v. Documentation to be furnished for availing the exemption/waiver of custom duty shall be specifically listed in the letter of credit also as a prerequisite for release of payment against shipping documents and this documentation shall necessarily form a part of shipping documents.

vi. Owner will not bear any liability towards payment of Safeguard Duty, Anti-Dumping Duty, Protective Duty and applicable IGST including GST Cess on same or Countervailing Duty on subsidized articles or any other such duties of Customs imposed by Government under Customs Tariff Act, 1975.

vii. In case custom duty rate as quoted by foreign bidder is less than Actual rate applicable on due date of submission of last price bid and payment of custom duty is on Owner's Account, differential amount on account of above-mentioned rate variation will be recovered from foreign bidder.

3. INCOME TAX

a. Foreign supervisors/suppliers/contractors

Prices of site work, contracts and other services of foreign supplier/contractor shall be gross of income tax i.e., inclusive of Indian income tax at the applicable prevailing rate as per Indian Income Tax Act and Rules there under.

Owner shall deduct withholding tax at source (TDS) as applicable while making payments against each invoice. Certificate for TDS shall be provided to the supplier/contractor.

In case foreign bidder quotes Prices of site work, contracts and other services "net of Income Tax" i.e., exclusive of Indian income tax, Owner shall deduct and deposit TDS as applicable after grossing up the sums due while making payments against each invoice at the applicable prevailing rate as per Indian Income Tax Act and Rules thereunder.

Foreign bidder shall furnish the information required in line with the prevalent provisions of Income tax act read with rules thereunder including but not limited to Tax residency certificate,

Form 10F, No permanent establishment declaration, No business connection certificate, PAN in India if available.

Failing to provide above documents/information, tax will be withheld at rates applicable as per the provisions of Income Tax Act, 1961 read with rules thereunder and the benefit of reduced rates will not be given.

If the non-resident is unable to obtain & submit Tax Residency Certificate to the Owner within a reasonable time, the bidder should furnish Form 10F along with an undertaking to the effect that the bidder is a tax resident of (the specified country) and that they shall obtain and provide the tax residency certificate (TRC) to the Owner before 30 days of submission of first Invoice by them or within 3 months from the date of entering into contract whichever is earlier.

In case of contracts with term exceeding one financial year, the relevant documents like TRC, Form 10 F, No PE / Business Connection Certificate etc. as applicable, as per Income Tax Act, 1961 must be submitted at the beginning of each financial year and the Owner will not bear additional tax liability (if any) arising from non-submission of documents.

The bidder shall be liable to intimate the subsequent changes (if any) to the information submitted against any of the above particulars, along with full details.

In addition to the above particulars, the bidder should also provide any other information as may be required at a later stage for determining the taxability of the amount to be remitted to the non-residents.

In case, any additional tax liability arises on the Owner due to any action of bidder like delay in submission / non-submission of information / documents required as above or change in residential status post submission of documents or change in any document (like TRC, Form 10F etc.) after its submission shall be recovered from the supplier/contractor.

b. Indian resident supervisors/ suppliers/contractors

Prices for supply and services of Indian suppliers/ contractors shall be inclusive of income tax.

Tax shall be deducted at source (TDS) by Owner on all sums due to supplier/contractor in accordance with the provisions of Indian Income Tax act read with rules thereunder as in force at the relevant point of time.

Owner shall issue a Tax Deduction Certificate to the supplier/contractor evidencing the tax deducted or withheld and deposited by Owner on payments made to the supplier/contractor to enable the supplier/contractor to claim the credit of Tax deducted by Owner.

c. INCOME TAX (General Points):-

i. The supplier/contractor shall also be responsible for ensuring compliance with all applicable provisions of the Direct Tax Laws of India including, but not limited to, the filing of relevant Tax

Returns and shall promptly provide all information required by the Owner for discharging any of its responsibilities/liabilities under such laws in relation to or arising out of the Contract. For the lapses/failure, if any, on the part of the supplier/contractor and consequential penal action taken by the Income Tax department, Owner shall not take any responsibility whether financial or otherwise and shall be indemnified by the supplier/contractor.

ii. The Indian Income Tax Act and Rules made thereunder contains provisions permitting deduction of tax at source (TDS) at lesser rate if the supplier/contractor is able to justify to the Income Tax Authorities such lesser rate of deduction. However, a deduction once made has to be deposited by the Owner with the Income Tax Authorities in India and will not be adjustable by the Owner. It is therefore in the interest of the supplier/contractor that prior to release of any payment due to the supplier/contractor under the Contract that the supplier/contractor obtains from the relevant Income Tax Authorities in India, a certificate specifying the rate of deduction/withholding of Income tax at source, failing which, payment to the supplier/contractor shall be made by the Owner after withholding/deduction at the rate as may be applicable to the supplier/contractor as per provisions of Income Tax Act, 1961.

iii. TDS on interest recovered on Mobilization/Other Advance will be deposited by the supplier/contractor and same would be reimbursed by the Owner against submission of Form-16A (TDS certificate).

C. INVOICING METHODOLOGY W.R.T. TAXATION

Following invoicing methodology shall be followed :

1. In case of domestic / foreign PO's (Other than 2 below) , Invoice/E-Invoice shall be raised by the supplier/contractor in the name of Owner and consignee shall be Owner.
2. In case of package MR's (where title transfer or take over is envisaged to take place at site after completion of site work) and tenders, supplier/contractor shall bring material at project site in their own name and they themselves shall be consignee. As per provisions of contract between Owner and supplier/contractor, Invoice/E-Invoice shall be raised by supplier/contractor to Owner after charging GST.

D. APPLICABILITY OF TAX CREDIT

GST input credit to be considered as NIL.

E. EVALUATION METHODOLOGY W.R.T. TAXES

Following shall be loaded for evaluation:

1. Applicable Custom Duty, Social Welfare Surcharge etc, (excluding IGST & GST Compensation Cess (if applicable) on imported material which shall be dealt as per bid evaluation methodology given in E2 below) shall be loaded for price bid evaluation in respect of supplies for which bill of entry has to be filled by Owner.
2. GST on which input credit is not available to Owner including GST Compensation Cess (if applicable).
3. Applicable Income tax, in case foreign bidder quotes prices net of taxes.

F. TAXATION TERMS FOR INDIAN SOURCED SUPPLIES (Applicable in case of foreign supplier)

Shall be the same as applicable for Indian bidders.

G. TAX IMPLICATION WHERE FABRICATION YARD IS OUTSIDE THE FACTORY PREMISES, WHEREVER APPLICABLE

In case of package MRs and tenders, since contractors/suppliers shall bring material at project site in their own name and raise invoice to Owner (as per payment milestone achieved) after charging GST, location of fabrication yard whether inside or outside factory premises will not attract any additional liability.

H. TAX IMPLICATION WHERE OWNER WILL ISSUE FREE ISSUE MATERIAL (FIM) TO CONTRACTORS/SUPPLIERS

Where Owner issues FIM's to suppliers/contractors, material will be released against delivery challan and such FIM shall be received back in factory premises as per provision of GST.

I. STATUTORY VARIATION (IN CASE OF MRS & TENDERS)

No variation on account of taxes and duties, statutory or otherwise, shall be payable to Supplier/Contractor except for the following:

1. GST: If after the due date of submission of last price bid and up to the contractual delivery/completion period (*), any increase/decrease occurs in the applicable rate of GST, the variation in such GST shall be to Owner's account and shall be adjusted (increase / decrease) to / from the Supplier's/Contractor's invoices based on the documentary evidence.

   Any increase in GST after the contractual delivery/completion period (*) shall be to Supplier's/Contractor's account. However, any decrease in the rate of GST shall be passed on to Owner.

   For calculating Statutory Variations ceiling amount as declared by the Bidder in price schedule shall only be considered.

2. Basic Custom Duty (BCD) & Social Welfare Surcharge (SWS): If after the due date of submission of last price bid and up to the 2/3rd of contractual delivery/completion period (*), any increase/decrease occurs in the applicable rate of BCD & SWS on materials imported, the variation in such BCD & SWS shall be to Owner's account and shall be adjusted (increase/decrease) to/from the Supplier's/Contractor's invoices based on the documentary evidence.

   Any increase in rate of BCD & SWS on materials imported after the 2/3rd of the contractual delivery/completion period (*) shall be to Supplier's/Contractor's account. However, any decrease in the rate of BCS & SWS on materials imported shall be passed on to Owner.

   For calculating Statutory Variations in BCD/SWS, ceiling amount of CIF Value and rate of custom duty as declared by the Bidder in relevant price schedule shall only be considered.

Note: Indian supplier/contractor to consider input tax credit of IGST and GST Compensation Cess if any (in case of import of raw Materials / components) in their quoted prices. Hence, Statutory variations on same in case of imported materials from outside India in Supplier's/Contractor's name (i.e., for Indian Bidders) shall be to Supplier/Contractor account.

3. Any new output taxes, duties, cess, levies notified or imposed after the due date of submission of last price bid but up to the contractual date of delivery/completion (*) shall be to Owner's account. These shall be reimbursed against documentary evidence. However, in case of delay attributable to supplier/contractor, any new output taxes, duties, cess, levies notified or imposed after Time for Completion, defined as above, shall be to supplier's/Contractor's account.

J. TAX INDEMNITY

Any omission/ errors of interpretation of applicability of taxes, duties, cesses and levies, whatsoever named, howsoever named, as are payable to any government, local or statutory authority in India or in any country other than India by the supplier/contractor shall be to supplier's/contractor's account.

If any fine/penalty/any other levy is required to be met by the Owner arising out of any non-compliance/fault/fraud/willful suppression/misstatement of facts/information/documents, whatsoever, of any applicable laws of India or any country other than India by the supplier/contractor/their personnel/sub-contractors/agencies, the same shall be recovered from any amount payable to the supplier/contractor under this contract or under any other contract of the Owner.

If any tax is paid / required to be paid by supplier/contractor in pursuance of any demand of any law enforcement agency/Tax Authority on account of non-compliance/fault/fraud/willful suppression/misstatement of facts/information/documents, whatsoever, of any applicable laws of India or any country other than India by the supplier/contractor/their personnel/sub-contractors/agencies, the same shall be to supplier's/contractor's account only.

Note: (*) Contractual delivery/completion period shall include extended contractual delivery/completion period for the reasons attributable to Owner or due to Force Majeure condition.

K. General

Prices, taxes, duties including GST on any transaction between Supplier/Contractor and their Sub-Contractor/sub-supplier shall be included in the Lumpsum Quoted Price.

Taxes, duties and levies as may be applicable on the input materials and/or services used for Contract shall be to the Supplier's/Contractor's account and no separate claim in this regard will be entertained by the Owner.

The Supplier/Contractor shall itself be informed of all the applicable laws, notifications, rules, circulars and other communications of the State or Central or other authorities with regard to levy of any tax, duty, cess, levy or fee etc., which in any manner may impinge upon it in performance of any obligations/ responsibilities under or arising out of the Contract.

NRL shall be entitled to make necessary tax deductions at source as per the prevalent laws.

PWAMC - TERMS & CONDITIONS

1. Please quote for the Post Warranty Annual Maintenance Contract as per scope defined in Material Requisition / Technical portion. Please furnish the Price as per the Price Schedule/BOQ.

2. The AMC Charges quoted in Price Schedule Format shall be inclusive of all the charges for Transportation, Lodging, Boarding, all insurances including third party insurance, all Taxes & Duties and all other incidental charges etc. but excluding GST which shall be payable extra at actual on Submission of Invoice as per GST rules. Owner will not have any liability, whatsoever, over and above the quoted prices.

3. The payment terms for the AMC shall be as per Annexure-I to SPC.

4. The order for AMC will be placed before the expiry of contractual Warranty Period. The price of AMC services will remain firm & fixed for the complete execution of AMC contract. In case there is delay in start of AMC from the date of expiry of warranty period, the charges shall be paid on prorata basis for the duration curtailed from original specified AMC period.

5. Within 2 weeks of placement of Order for AMC, Seller shall submit BG for 10% of the Maximum annual AMC amount which shall be valid for the entire AMC period plus 2 months claim period.

6. Periodic and Preventive maintenance: Seller shall depute their engineers to installation site as & when required for regular checkups, as part of periodic maintenance. Seller shall also depute their service engineers periodically for preventive maintenance, major repairs /replacement and reporting. Price shall also include emergency visits as necessary.

7. Scope of AMC shall be as per MR/ Technical portion. The quoted rate shall include providing all manpower, machineries and materials required to carry out the work as per scope of work of AMC defined in the MR.

TERMS & CONDITIONS FOR SUPERVISION OF ERECTION, TESTING & COMMISSIONING / TRAINING AT SITE / HAZOP STUDY

1. Bidder shall quote per diem charges which shall include lodging, boarding, medical, local transport, all insurances including Bidder's personnel and third party insurance, all other incidental charges and all taxes & duties except Goods & Service tax (GST) (for bidders registered in India) which shall be quoted extra and shall be payable against submission of Invoice as per GST tax rules.
2. Taxes as per Government policy shall be deducted at source by Purchaser while making payments against each invoice.
3. For Foreign Bidders : To & fro air fare by economy class through most economical route by AC 2 Tier by Train Fare(*) within India nearest *to site (Nearest International Airport: Kolkata/Guwahati, Nearest Domestic Airport: Jorhat/Dimapur, Nearest Railway Station: Furkating)*, will be reimbursed at actual. Local transportation in bidder's country shall be to bidder's account.
   (*) In case a bidder travel's by any other mode of transport, the payment shall be made against documentary evidence subject to maximum of AC 2 Tier train fare.
4. For Indian Bidders: To & fro air fare by economy class through most economical route by AC 2 Tier by Train Fare(*) nearest to site *Nearest International Airport: Kolkata/Guwahati, Nearest Domestic Airport: Jorhat/Dimapur, Nearest Railway Station: Furkating)*,will be reimbursed at actual.
   (*) In case a bidder travel's by any other mode of transport, the payment shall be made against documentary evidence subject to maximum of AC 2 Tier train fare.
5. Per diem charges shall be payable from the day bidder's person reaches site up to the day he leaves the site. No payment will be made for travel days/period.
6. In case bidder's representative is not called for during Intervening weekly off/Holidays, the same shall be payable at the normal rate of site services. However, in case Seller's representative is called at site during weekly off/Holiday, the same shall be paid @ overtime rate quoted extra by bidder.
7. In case bidder's representative takes leave, per diem charges for that day shall not be payable.
8. Working hours prevailing at site, normally 8 hours/day - Monday through Saturday and holidays as applicable to Purchaser's site personnel shall apply.
9. Selection of Foreign/ Indian supervisory personnel shall be left to Owner's/Purchaser's choice.
10. Vendor's supervisory personnel shall observe/abide by site working conditions prevailing at the existing site, safety codes, Indian laws and local laws.
11. A notice period of 15 days will be given for mobilization of supervisory personnel for supervision of erection.
12. Validity period of per diem rate shall be up to the end of guarantee period. Further, in case services for supervision are required after the guarantee period, 7% annual escalation shall be applicable.
13. Payment: Refer Annexure-I to SPC.
14. Requirement of Employment Visa for Foreign Nationals- Refer SPC.

Bidder's Acceptance:

RFQ No. :
Item :
Offer No. :

Signature with Name & Date and
Seal/Stamp of the Bidder

TERMS & CONDITIONS FOR INSTALLATION/ SITE WORK (in supply items)

1. The Bidder shall perform their jobs in eco-friendly manner and in consonance with the objectives of NRL / EIL.

2. Construction / erection work for several other project facilities at various locations within refinery site will be progressing concurrently. It will be the responsibility of Bidder to seek approvals from NRL/EIL for working within & outside the refinery limits including gate pass for their manpower and construction equipments etc. and also of taking all suitable safety measures as per regulations in force for the safety of existing refinery.

3. The material shall be collected by the Bidder from NRL's stores/ Project Site/ Bidder's own stores (as the case may be) and transported to the erection site at Bidder's own cost and risk.

4. All labour (both skilled and unskilled), tools, tackles and consumables, shall be arranged by Bidder at his own cost.

5. Bidder shall arrange for the necessary transport, accommodation, medical, canteen and other facilities for their employees/staff at their own cost and abide by all labour laws, safety codes and statutory regulations and keep EIL/NRL indemnified in respect thereof.

6. Though insurance for the project for permanent incorporation of material and services shall be covered by NRL under Marine cum Erection Insurance policy. However, supplier / sub-contractor shall take insurances as per international practice including but not limited to the following:

   a. Workman's compensation insurance, covering all employees of supplier / Sub-contractor and their personnel for statutory benefits as set out and required by law (Indian in the area of operation or area in which supplier / sub-contractor may become legally obliged to pay benefits for bodily injury or death.

   b. Transit / Travel insurance and Medical insurance.

   c. Insurance against fire, theft, damages and loss of all property owned by supplier / sub-contractor at the construction site.

   d. Group Personnel Accident insurance covering supplier/sub-contractor's employees, not otherwise already covered under above, operating from project site as per supplier / sub-contractor's established practices.

   e. Cover against all risk for the materials issued by EIL/NRL.

   f. Bidder shall be working at NRL's site along with agencies that will be engaged in the other activities. For this purpose the third party risk shall also be covered by Bidder.

7. The Bidder is responsible for keeping his workplace neat and clean and shall always avoid scattering of any materials around the work place. The Bidder shall clear the work site of all debris, materials, tools, tackles etc. immediately upon completion of the job. Any temporary Line/cables etc. laid for the purpose of execution of a particular job shall be immediately removed to an agreed location and the site cleared off all such materials.

8. The Bidder shall not throw out gaskets, used electrode pieces, hand gloves, cotton wastes, gunny bags, polythene bags etc. into open channel, any drains or pipe line system. These are to be collected together and deposited in bins/waste collectors earmarked for the purpose of disposal after consultation with Engineer-in-Charge. Disposal of surplus earth/ debris/rocks shall be outside the plant boundary.

9. LAND FOR SITE OFICE AND RESIDENTIAL ACCOMODATION

The land shall be allocated by Owner to the Bidder free of Charge limited to the area required for temporary site office. Additional land (if required by Bidder) over and above the allocated land shall have to be arranged by the Bidder at their own cost.

No land shall be provided for accommodation purposes to the Bidder, or the purposes of any Bidder's personnel.

The sub-contractor shall remove all temporary buildings/ facilities etc. immediately after completion of works in all respects.

10. CONSTRUCTION POWER, WATER, LAND FOR FABRICATION YARD CONSTRUCTION

i. Construction Power & Water:

Construction Water

The Contractor shall make his own arrangements of construction as well as drinking water & testing water at his own cost. Water used for the construction/ testing activities shall meet the necessary requirements as laid down in specifications. Required mandatory tests shall be carried out as per specifications.

Subject to availability, Construction water shall be provided by the Owner on free of cost basis for work inside the Refinery Complex. However, in case the Owner is not able to provide construction water due to any reason whatsoever, the Contractor shall be responsible for making all arrangements for Construction water at his own cost. Any statutory requirements/ documentation etc. to this effect shall be met by the Contractor.

However, in case of non-availability of above due to any reasons, Contractor shall be responsible for making all arrangements for construction water at his cost. Any statutory requirements/documentation etc. to this effect shall also be met by the Contractor.

Non-availability of water due to any reason shall not entitle the Contractor for any claim against OWNER/EIL on account of cost and time implications.

Construction Power

The Contractor shall make his own arrangements for Construction Power required for carrying out the scope of works as per Bidding Document.

Subject to availability, construction power shall be provided by the Owner inside the Refinery complex from the nearest Substation / tapping point on free of cost basis upto a maximum power consumption of 400 KVA. If during the execution stage, the Contractor requires more construction power from Owner, then the same shall be on chargeable basis @ Rs. 9.00 per KW Hour.

However, in case OWNER is not able to provide construction power, Contractor shall be responsible for making all arrangements for construction power at his cost. Any statutory requirements/documentation etc. to this effect shall also be met by the Contractor.

Further, non-availability of construction power or due to any other reasons shall not entitle the Contractor for any claim against OWNER on account of time and cost implications. Therefore, the Contractor shall within the contract price make alternative arrangements to cope with such eventuality.

Additional power, if required, to meet the contractual requirements, shall be arranged by the Contractor at its own cost.

OWNER shall recover the cost of power supply every month at prevailing rate (without prejudice to any other mode of recovery available to OWNER) by deduction from the Contractor's bills. The energy meter to be installed by the Contractor shall be tested and certified by State Electricity Board or any other agency approved by OWNER/ EIL.

ii. Owner is in the process of acquiring Tea Garden Land adjacent to northern boundary wall of the refinery having access from inside the refinery site. The land required for setting up of temporary facilities for Fabrication Yard (including blasting & painting), Storage Area, Warehouses and Laydown area will be provided at free of cost in the above site after removing the tea bushes by the Owner Depending on the availability. The required construction water, power will be provided by the Owner at a single point near the TCF.

iii. Additional Land (if required) for setting up of temporary facilities like Batching Plant, Labour Hutments etc., shall be arranged by Contractor at their-own cost outside the Refinery Premises. All the infrastructure arrangements in connection with these facilities including Water, Power and Security Arrangements etc. shall be in the scope of Contractor without any extra cost to Owner.

11. All Cranes, handling equipment etc. as required, shall be arranged by bidder at his own cost.
12. As per the applicable Factory Act, the Labour License, if required, shall be taken by Bidder before starting the works.
13. All necessary compliances to various statutory requirements including Factories Act, Labour Welfare legislations, PF & ESI etc. shall be bidder's responsibility.
14. Necessary tax registrations etc., if any, shall be bidder's responsibility.
15. The Contractor shall adhere to the Health, Safety and Environment (HSE) management system as per EIL specification no. 6-82-0001, OISD Guidelines 192 and OISD Guidelines 207, enclosed.
16. The Contractor shall adhere & comply with the requirements as per NRL USER MANUAL on E-WORK PERMIT SYSTEM & applicable Job Safety plan, enclosed.
17. It shall be bidder's responsibility to comply with all rules and regulations in force at construction site.
18. Surplus material, if any, after completion of site work, shall not be allowed to be taken out of the NRL site premises if Owner has paid for the surplus materials.
19. Contractor to follow the appropriate system for movement of equipment/ materials/ items inside refinery area. Format for Indemnity Bond is enclosed.

TERMS & CONDITIONS FOR TRAINING OF OWNER PERSONNEL AT VENDOR'S WORKS/ TRAINING FACILITY.

a. Bidder shall quote Training charges of EIL's/Owner's Operation and Maintenance personnel at Bidder's works/training facility on lump sum basis.

b. All expenses including but not limited to Air-fare, Accommodation, local conveyance, living expenses etc of EIL's/Owner's personnel shall be borne by Purchaser.

c. Quoted prices shall be inclusive of all taxes & duties except Goods & Service tax (GST) which shall be payable extra at actuals against submission of documents as per GST rules.

d. A notice period of 15 days will be given by EIL for prior arrangement.

e. PAYMENT TERMS: Refer Annexure-I to SPC.

Bidder's Acceptance:

RFQ No. :

Item :

Offer No. :

Signature with Name & Date and

Seal/Stamp of the Bidder

विदेशी सामग्रियों के लिए पैकिंग, मार्किंग, शिपिंग और दस्तावेज विनिर्देश

PACKING, MARKING, SHIPPING AND DOCUMENTATION SPECIFICATIONS FOR IMPORTED MATERIALS

Rev. No	Date	Purpose	Prepared by	Reviewed by	Approved by
2	20-04-2024	ISSUED FOR COMPLIANCE	DDC	DRC	CGM (I) & HOD (Shpg)
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0	05-12-2012	ISSUED FOR COMPLIANCE	DDC	DRC	GM (I)

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Abbreviations:

CM	-	Centimeters
DDP	-	Delivered Duty Paid
DGR	-	Dangerous Goods Regulation
EIL	-	Engineers India Limited
ETA	-	Estimated time of arrival at Destination Port
ETD	-	Estimated time of Departure at the Port of Loading
EXIM	-	Export Import Policy of India
FCA	-	Free Carrier
IATA	-	International Air Transport Association
IMDG	-	International Maritime Dangerous Goods
ISPM 15	-	International Standards of Phytosanitory Measures 15
Kg	-	Kilograms
mm	-	Millimetre
MSDS	-	Material Safety Data Sheet
MT	-	Metric Ton
NO. / NOS.	-	Number / Numbers
P.O.	-	Purchase Order
UN NO.	-	Unique Identification Number given for Hazardous Goods

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1. GENERAL

1.1 Purpose

This specification details the minimum requirements for the preservation, packing, marking, shipping and documentation of Products, materials and equipment as specified in the respective Purchase Orders or Contracts. This specification forms an integral part of the Purchase Order or Contract issued. However, whenever specific instructions are detailed in the Purchase Order / Purchase Requisition and are in conflict with this specification, particular instructions mentioned in the individual Purchase Order or Contract or Purchase Requisition shall prevail over this general specification.

1.2 Scope

Supplier shall be responsible for sea worthy export packing meeting the minimum requirement specified herein & capable of performing all necessary functions like prevention of damage to the contents, sufficient to support frequent handling and lengthy period of outdoor storage in adverse weather conditions. Workmanship and materials used shall be of high standard meeting the technical requirements and in accordance with best commercial export packing practices.
The scope of this specification is to define Supplier's responsibilities in terms of:

- Preservation of the materials and equipments before packing.
- Packing of the materials and equipments for road, rail, sea and/or air transportation to ultimate destination i.e. project site.
- Making cases/crates
- Chemical Treatment/Fumigation before packing to prevent fungus and damage
- Marking of cases/crates.
- Documentation for shipments

1.3 Responsibility and liability

Supplier shall be held responsible for any damages and/or losses of all and any kind that may occur by not respecting these specifications. Owner/EIL reserves the right to reject any packing when the packing does not conform to these specifications/instructions and/or when the packing does not ensure perfect protection of the goods and materials. Supplier is responsible for the weights and dimensions declared, and the marking of the packages. Supplier will be held responsible in the event goods and materials becoming useless, broken or damaged as a result of poor packing and/or stowing or due to corrosion, because of insufficient or inadequate protection. All direct and indirect costs resulting thereof will be back charged to Supplier.

1.4 Requirements and Conditions

The following requirements are intended as minimum requirements, and compliance to these requirements in no way absolves or relieves Supplier of any responsibility or obligation outlined in the Purchase Order / Purchase Requisition. In all circumstances, the packing will be designed and constructed in order to support materials during transportation as well as to prevent the materials from damage due to impact, extreme climatic conditions, sun and rain. It must be ensured that the materials and equipments are delivered to the job site by sea, road or air, in good condition.

The method of packing and packaging materials must be sufficient to protect the goods from the hazards associated with handling and storage conditions encountered in transit

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and at site. The method of marking packages must be sufficient to distinguish each package from others. The documentation prepared for shipments must be sufficient for use in international transportation and customs clearance procedures.

The Supplier shall, at its own cost, ensure items to be transported are carefully packed and protected in accordance with best practice, having due regard to the climatic conditions encountered during the passage, method of carriage and handling / loading / unloading processes. In addition to any of the measures detailed within this Specification, the Supplier shall apply any other measures that, in its experience, are required to safeguard the particular item. The Supplier shall obtain the approval of EIL/Owner for any variation to the packing, marking and shipping requirements outlined in this Specification and PO/PR as applicable.

2. CLEANING AND PRESERVATION

2.1 Cleaning

All equipment, materials and parts shall be thoroughly cleaned inside & outside and shall be free from grease, oil, weld spatter, rust and all other foreign matter prior to preservation.

2.2 Preservation

Articles may be exposed to severe environmental or climatic conditions, moisture and dust. All materials and equipment shall be packaged suitable to prevent damage and deterioration during transportation and storage. Where damage occurs due to inadequate packaging of items, the liability for costs associated with rectification of the damage will be to the Supplier's account. All metals subject to corrosion shall be treated with a corrosion preservative suitable for the purpose intended. Products susceptible to corrosion must be packaged in a dry non-corrosive environment for the duration of shipment and storage, for a minimum of 1 year or any other higher duration specified in the PO/PR. All bright and machined parts shall be coated with a recognized rust preventative suited to the particular application concerned. All internal parts of machinery shall be treated with lubricant containing rust and oxidation inhibitors to protect equipment from any possible damage. Such lubricants shall be compatible with those which will subsequently be used in service and shall be identified by appropriate tagging. Electrical equipment and instrumentation shall be packed with a suitable desiccant. Delicate equipment such as instruments, electrical switchboards and panels etc. shall be packed for protection to eliminate the effects of vibration.

Wherever necessary, desiccant packs shall be kept to avoid excessive moisture in the packing.

3. PACKING

3.1 General

The instructions herein shall be considered as general directives and minimal requirements, which are applicable to the packing of all equipment and materials. The Supplier is responsible for the correct and adequate packing of the equipment and materials so that these equipment and materials will arrive at destination undamaged and the packing itself in such a condition that, if not otherwise required, it will be suitable for a minimum of 1 year storage.

3.2 Packaging Materials

All packaging together with packaging and protective materials shall be new, maintain its integrity and perform its intended function while being transported, handled and stored.

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The quality of packing shall provide maximum protection against damage, breakage and pilferage during transport, storage and multiple handling, including handling by hoisting, lifting devices and / or forklift trucks. Material used for packaging, packing, wrapping, sealers, moisture resistant barriers and corrosion preservatives shall be of recognized brands & grades and shall conform to the best world standards.

Timber material shall be treated / fumigated to prevent infestation by insects or similar, for all material in accordance with ISPM 15. ISPM 15 describes phytosanitary measures to reduce the risk of introduction and/or spread of quarantine pests associated with solid timber packaging material (includes dunnage). Any packing made of wood, must be made from new treated wood (according to ISPM 15 IPPC, latest version). Used cases, crates and cardboard packing are not allowed. Packaged Products showing any damage, defect or shortage resulting from improper & inadequate packaging, packaging materials or packing procedure or having concealed damage or being short at the time of unpacking shall be subject to rejection and be replaced at the Supplier's cost

3.3 Packing requirements

3.3.1 Wood treatment

All solid wood, used for packing (including wooden pallets) and/or stowage should be treated (heat treatment or fumigation) according to the international standard ISPM 15 (IPPC), latest version. Use of untreated wood is not acceptable. Phytosanitary Certificate, Fumigation or treatment certificates have to be issued by the official government authorities and must accompany the original set of shipping documents.

3.3.2 Wooden Boxes and Crates

Interior support board shall be of strength to withstand stevedore handling. Tops of crates shall be one piece wherever possible to avoid seepage through cracks; otherwise a top coating is required. Waterproof lining shall be used for sides, ends and top of crates, proper venting of cargo boxes containing machinery is required, as well as sufficient use of desiccants. Crates shall be diagonally braced on all faces and suitable for hooks, slings and forklifts. Heavy items shall be secured with wood braces. Fragile items shall be cushioned. Material packed in large boxes shall be layered between plywood sheets to maintain load integrity during transit. Banding shall be used on all boxes to prevent distortion / deformation of the box.

3.3.3 Pallets

When equipment and/or materials are packed on pallets (wood or synthetic), these should be solid double deck pallets that provide adequate load support during transportation and storage (under not always ideal conditions). The pallets should have a dynamic load capacity, enough to carry the mass loaded on the pallet. Where feasible, the top surface of the pallet must be flat. The pallet design must enable safe handling by forklift, cranes etc. and storage on rough surface. Pallets shall be covered with wrapping. All corners, horizontal and vertical shall be protected with cardboard protection strips. The pallet must be tide on all sides with steel or synthetic straps.

3.4 Packaging

All equipment and materials shall be properly fixed (by bolts, clamps, supporting beams, etc.) in such a way that internal movements and / or loosening is impossible. Under the

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top cover –(roof) depending on the case and crate length, sufficient number of strong beams shall be placed and properly fixed in order to allow stacking of the cases and crates avoiding any compression. Equipment parts and materials which may be subject to damage by vibration and/or shock must be protected using shock-absorbing material. All equipment and materials which may be damaged by moisture shall be packed in airtight bags in which sufficient desiccant material (e.g. silica gel) is placed. All openings on the equipment must be closed with wooden / metal or plastic covers to prevent damage to the openings and interiors. Fragile and loose parts easily damageable pertaining to the equipment must be securely and properly packed in a separate case.

3.5 Waterproofing

Cases including the cover shall be internally lined with a strong type of waterproof paper or plastic foil. Equipment and materials shall always be packed in a foil (polyethylene or aluminum) for extra (double) protection against rainfall. These foils shall be applied in such a way that they are self draining.

3.6 HAZARDOUS CARGO

All hazardous material must be packed in adherence to the packing, marking and labeling requirements as required by the appropriate Government and International Transportation regulations.

Hazardous materials shall be suitably packaged, packed separately from other materials and shall not be encased inside other packaging containers. All packages shall be marked and labeled with markings and labels as stipulated by Road Transport, and the Dangerous Goods Regulations (DGR), laid down by the International Air Transport Association (IATA) for airfreight and Sea freight IMDG Codes and Regulations in accordance with government and agency requirements. Regulations and Codes as defined by the International Maritime Organization (IMO) together with Government and Regulatory Agencies within the country of origin, country of destination or country that the products shall transit through shall be adhered to at all times. All crates / boxes / drums / packages containing Hazardous material shall be marked clearly on the outside with the relevant international details (UN No, IMCO / IMDG class, Packing group etc.) and the relevant Material Safety Data Sheets (MSDS) must accompany the goods. The Supplier shall produce any necessary hazardous cargo certificates, as required by the appropriate/concerned Government and International Transportation regulations, for all such shipments.

Seller to inform Buyer on the following in details after shipment of Cargo:

- Hazard Identification
- Fire Fighting Measures
- Accidental Release Measures
- Handling & Storage

4. GUIDELINES FOR PACKING GOODS

In the subsequent paragraphs, details of different types of packing for different types of goods are defined. Supplier shall make packing details/procedure based on the guidelines

Chemicals in powder form, catalysts, refractories & like materials etc. shall be packed in drums only.

4.1 Pipe

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All pipes 2" included and below shall be packed in crates. Pipes over 2" up to 6", shall be bundled and banded in bundles of uniform length. Bundling is carried out with U-IRON or traversal planks, joined with threaded connecting rods with locknuts.. Bundle weight shall not exceed 2,000 kg. All pipes are to be capped and ends sealed with waterproof tape (tape is not necessary if end caps are of the pre-shrunk or self-sealing type).Pipes larger than 6" shall be shipped as single lengths with the ends capped. End caps are to be of the recessed type to enable the use of soft faced hooks, but still completely sealing the end and also protecting the weld. All stainless steel / non-ferrous piping must be packed separately in wooden crates. Any banding of bundles is to be with the same material. The bundling and packing of pipe and instrument tubing shall enable the safe discharge of pipe on site using clamps and forklifts. All pipes shall be supported along their lengths to prevent bending/flexing during transport. During loading/unloading slings shall be applied to the center of the load as well as on each end to prevent bowing.

Pipe and rigid conduit smaller than DN50 diameter shall be bundled in units not to exceed 1000kg.Threaded and coupled pipe shall be equipped with plastic thread protectors. All material shall be segregated and shipped by generic material type to prevent cross contamination. Where wire rope or chains are used, adequate padding shall be used at points of contact with pipe. Care must be taken to prevent any chafing of pipes against each other or against the metal structures of the vehicle during transportation. Where necessary, such metal structures must be padded with planks or plastic tubes. Skids and dunnage must be used between the bundles in transit as well as in the storage of coated pipes.

4.2 Pipe Fittings, Flanges, Valves and Gaskets

All pipe fittings, flanges and valves up to 6", are to be packed in cases/crates. For items over 6", these may be fixed securely to a pallet base and enclosed in a crate, for protection. All flange faces / bevel ends shall be suitably protected with plastic caps / end protectors. Where valves have actuators attached, rigidity must be ensured for the valve and actuator. The vulnerable parts of the actuator are to be completely protected within a wooden crate. Empty spaces shall be filled with expanded PU foam to restrict movement in the crate. All stainless steel fittings, flanges and valves of all sizes, must be packed separately in wooden crates. Any strapping is to be with the same material. Gaskets are considered fragile and shall be treated as such. Individual gasket sizes shall be boxed and labeled separately. All threaded fittings and pipes should be greased and provided with plastic caps.

4.3 Steel Structure and Plates

Structural steel sections and plates shall be strapped in bundles of convenient size and weight for handling. Rolled and shaped plates shall be provided with suitable bracing to eliminate distortion during transit, and shall be bundled in uniform lengths. Each bundle shall be marked with a metal tag, hard stamped, secured under steel wrapping

4.4 Itemized Equipment

Units or parts belonging to main equipment but separately packed shall be clearly marked for easy identification with the main equipment to which they relate.

All gasket face of flanges, machined working surfaces and threaded parts of all equipment shall be covered with rust preventive tape or by application of oil based alkyd primers or zinc bases epoxies or thin zinc silicate coatings specially formulated for the preservation of CS and Alloy Steels. All flanged connections of vessels shall be protected by metal plates correctly casketed by wooden plugs or plastic caps suitably secured in position.

Vessels shall, where possible, be packed on skid constructions and secured with adjustable steel straps. Manholes and other major openings shall be protected with

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cover flanges or metallic plates firmly secured. Smaller openings shall be closed with plastic plugs / caps.

All vessel internals and items not installed by Supplier at works including accessories such as small parts, bolts, nuts, gaskets, etc. shall be packed in wooden cases separately for each vessel or apparatus and marked with the same item number as the vessel/apparatus in order to protect all parts from loss or damage in transit. Internals, bolts and gaskets for service/ testing operations shall be supplied with the vessels/ items by Supplier. All internals should be boxed separately and marked according to marking procedure; each item shall be supplied correctly and identified for field installation by others.

All vessels / heat exchangers or items of such construction shall be dried, thoroughly cleaned inside and be free of all dirt and loose foreign materials. The equipment shall be filled with Nitrogen. Make up arrangement for loss of Nitrogen along with a pressure gauge shall be installed.

Accessories for apparatus and vessels (small parts, bolts, nuts, washers, gaskets, etc.) are to be packed in wooden cases, separately for each apparatus or vessel. These cases must be marked with the same item number as the apparatus / vessel to which they belong. All commissioning spare parts to be packed separately, shall be marked with the relevant main item.

Pumps, compressors, rotating equipment, turbines and motors will require specific packing and preservation as per the relevant Technical Specification. For skidded equipment openings, flange faces, threaded connections, wires, valve stems, and other component parts that may be subjected to mechanical damage or corrosion shall be adequately protected. This protection shall be applied to all components, both those removed and boxed and those remaining in place on the skid assembly Each skid shall have one box strapped to it containing a complete set of drawings together with a manual covering installation and operating instructions and other pertinent instructions required for reassembly of components that were disassembled for shipment.

4.5 Control Panels and Electrical Devices

Equipment such as control panels, instruments and electrical devices shall be packed in an interior moisture/vapor-proof barrier with a silica gel or comparable desiccant. Desiccants shall be bagged to avoid dispersing in containers. The quantity of desiccant shall be calculated in accordance with the manufacturer's recommendations. Equipment must be secured to the case with bolts, blocks or straps. Adequate precautions (for example, shaft locks to prevent longitudinal / rotational movement of rotor shafts in motors) shall be included in the packaging of all equipment which has plain, ball or roller bearings so as to minimize the risk of bearing damage.

4.6 Instruments

Instruments shall be thoroughly clean, dry and free from rust and shall be individually wrapped using polythene sheets/U foam/ thermocol sheets depending upon the items and then packed in wooden boxes. The left out spaces and top of the boxes should be filled with rubberized coir to get proper cushioning effect. Special attention shall be paid for arresting movements of their operating mechanism during transportation. Silica gel or other approved desiccant shall be strapped inside but shall not come into contact with the paintwork.

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4.7 Cables

All electric cables to be packed in new cable drums made of steel and painted with epoxy resin paint. Cable ends to be carefully protected before packing. Over the cables polythene sheet should be wrapped and sealed properly. Cable drum can be put in wooden crates for ease in handling and transportation.

4.8 Saddles, Supports, Spiders and Lifting Equipment

All items which cannot be transported without independent supports must be supplied with Shipping saddles suitable for land and ocean transit. Such transport saddles are to be included within the scope of supply. Supplier is to advise of any requirement for lifting beams or other specialized lifting equipment and will include provision for use of such equipment for loading purposes. The *Supplier* is responsible for ensuring that all modules and oversize items are adequately braced and where required, plastic wrapped suitable for transport. Modules and oversize items shall be packaged to prevent damage during transport.

4.9 Assortment Of Package/ Spare Parts for Erection and Commissioning

Equipment and /or parts of different item numbers shall not be packed together in the same package. Small goods such as accessories, spare parts for erection and commissioning and special tools shall be packed separately in respective inner boxes with tags or labels attached there being clearly indicating their contents. In case that such accessories, spare parts and special tools is packed in separate boxes/ crates, item no. of main equipment shall be clearly mentioned in Main Shipping Mark for easy identification.

4.10 Containerization

As required the Supplier shall stuff the goods into 20 or 40 foot container (dry, open top, flat rack etc). Supplier to check the size of container before starting packing of equipment.

4.11 Protection of Cases/Crates

Since shipping containers are in general not water tight, packing in contact with the floor of the container shall be raised in order to prevent it from being damaged by accumulation of water.

It is responsibility of the Supplier to ensure that the cases/crates are stowed, secured and fastened inside the container. The Supplier shall take all the necessary precautions to conform to maximum weight allowed and centre of gravity of the container. The securing and fastening of the crates/cases can be carried out by nailing timbers on the bottom or on the vertical sides of the container.

4.12 Air Transport Packing

Air freight of goods and materials will be exceptional and shall be used only for goods and materials urgently required at site & which are highly sensitive to shock or vibrations such as instruments or those of small dimensions and weight.

In all instances the packaging of materials and equipment to be transported by air shall be in accordance with International Air Transport Authority (IATA) regulations. Type of packing depends on the goods to be packed and Supplier may use one of the following types:

- Triple-corrugated container

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- Wooden/cardboard packing cases
- Plywood cases

5. Marking

5.1 General

The purpose of the marking is to identify the packages and detail the weight and dimensions to assure efficient and correct handling during transport and upon arrival at destination.

5.2 Marking Instructions & despatch details

Packages and crates will be marked with indelible black paint, resistant to seawater. Marking must be perfectly legible. All packages shall be clearly and properly marked in English language if not otherwise specified

The shipping marks, which will be shall be stenciled on two sides and one end in clear characters at least 5 centimeters high (where crate size permits, otherwise use optimum size for each package dimension).

The texts shall be printed by means of stamps, stencil-plates or electronically. The use of stickers is not allowed, unless securely covered by plastic. Bundles shall be marked by embossing on two metal tags bearing the shipping marks and placed on each side of the package and securely attaching them to the goods. Paint shall be used on metal surfaces.

Labels or tags to be clearly visible and shall be of a quality to remain visible and attached during transit, handling and storage for a minimum period of 12 Months or any other higher period if specifically defined in the PO/PR.

When the goods are to be shipped in containers then marking may be stenciled on one end only. However, packages must be stowed in a manner that shows these marks.

Crates containing fragile articles must be packed with special precaution against risk of breakage and must be stenciled on all sides "FRAGILE - HANDLE WITH CARE". Where crates are not to be overturned, Supplier must show on the crates, clear and readily visible identification, to ensure they are kept in the correct position.

Packages/equipment of 2,000 kg or more must be marked with slinging points on all sides, in addition to the centre of gravity marks.

Packages should be marked consecutively i.e. 1 of 10, 2 of 10, etc. Do not duplicate package numbers. SUPPLIER is responsible for any loss or damage caused by incorrect marking.

All cases/crates shall also be marked with the appropriate international standard graphic symbols for handling.

As a minimum, all cases/crates are to be marked clearly on all four sides with:

"HANDLE WITH CARE" "RIGHT SIDE UP" "KEEP DRY"

In the case of packages with a single gross weight totaling 2,000 kg and/or a height of more than 1m, the centre of gravity shall be clearly marked with the symbol on two adjoining sides. For all items of equipment with an eccentric centre of gravity this symbol shall be marked at the bottom, side and top of the package.

The slinging and lashing points shall be marked with a chain symbol.

When packing in cases/crates, these packages shall also have metal corners at the slinging points.

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External front and rear sides of the boxes shall be planed for writing instructions. To facilitate identification, the required colour coding as per the specifications shall be carried out on each package and on corners of pipes & plates.

Dispatch details such as consigner/consignee address, contract/PO and case details, country of origin, port of delivery, stacking instructions shall be written on one side of the boxes. One copy of packing slip wrapped in polyethylene bag covered with aluminum packing slip holder to be nailed on the external surface of the box. A packing list and preservation instructions shall be enclosed in a clear weatherproof plastic re-sealable envelope stapled to the box such that the receiver may determine contents without opening the container. An additional packing list is to be enclosed in a clear waterproof plastic re-sealable envelope stapled inside the container. Stapling of the envelopes shall not prevent removal of the documents.

5.3 Shipping Marks

Each shipping unit (package) shall be marked as shown below using letters of at least 50 mm in height. Markings shall be shown on the top and two (2) adjacent sides of each shipping unit/package and shall be of waterproof ink or exterior grade, waterproof paint in a colour which produces high contrast with the background. Packages in any one consignment shall be numbered consecutively and in sequence commencing with the number one (1).

(OWNER)

PROJECT

WITH COMPLETE

ADDRESS

VIA (PORT) INDIA

PURCHASE ORDER NO. ----------

NET WEIGHT ---------- KGS. GROSS WEIGHT ---------- KGS.

DIMENSIONS ---------- X ---------- X ---------- CMS

PACKAGE NOS. (SL. NO. OF PACKAGE) OF (TOTAL NO. OF PACKAGES)

TAG / ITEM NO. ----------

COUNTRY OF ORIGIN----------

SHIPPER'S NAME----------

The details of the Owner / Project are defined specifically in the Purchase Order / Contract.

5.4 Cautionary Symbols

In order to facilitate loading unloading and handling of cargo, Supplier shall stencil the necessary Cautionary Symbols on the proper place at two (2) opposite ends of the package. Symbols for special handling are illustrated below. These symbols must be used whenever appropriate.

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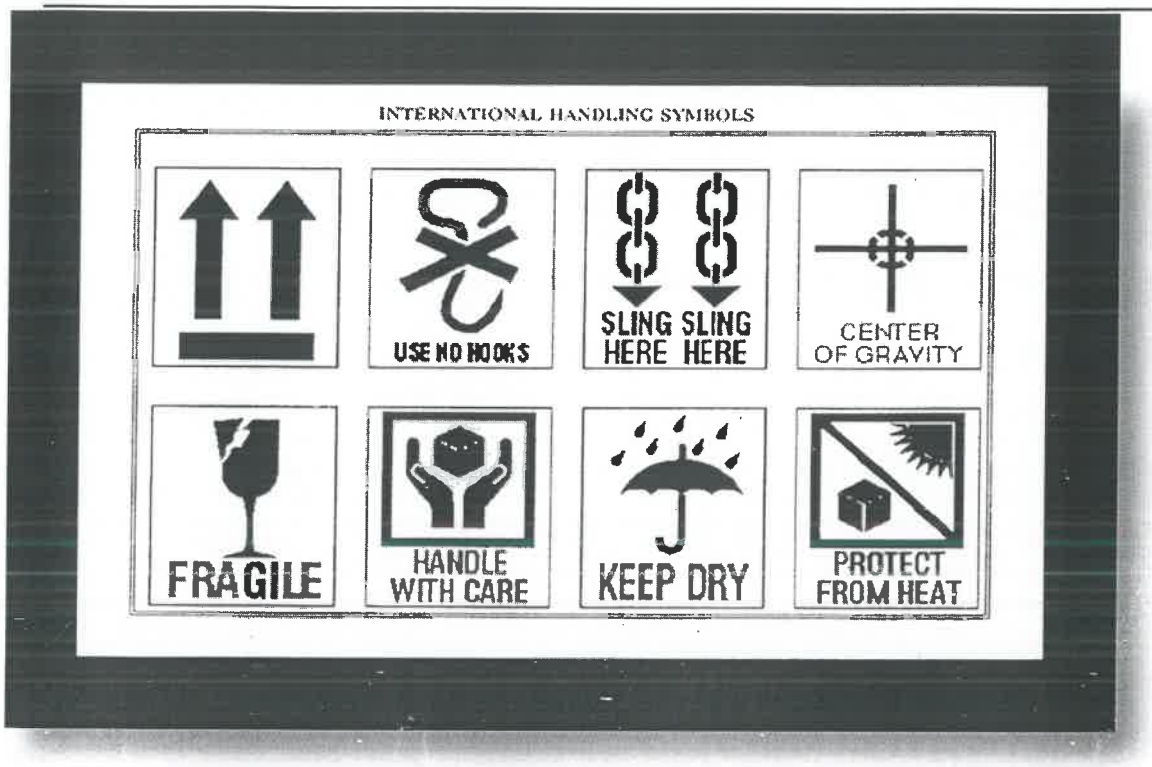

Symbols will be applied with exterior grade paint or waterproof ink in a colour that produces a High contrast with the surrounding background. Easily damaged material shall be Marked "FRAGILE" and also when required, "HANDLE WITHCARE", "COOL STORAGE", and / or "USE NO HOOKS". Material that must be kept upright to prevent damage, such as machinery, motors, etc., will be marked "THIS WAY UP" and if appropriate "TOP HEAVY", with arrows on all sides of box pointing to top. When required, due to length or unbalanced weight, crates or boxes will have a centre of gravity indicated by the relevant symbol and the words "CENTER OF GRAVITY" will appear in letters at least 24mm (1.0 inch) high, adjacent to stripes. Proper placement of the "SLING HERE" symbol will better insure correct use of lifting gear. Special marks, such as "FRAGILE", "KEEP DRY" or positional "DIRECTION ARROWS" shall be in RED.

5.5 Storage Code

The type of storage required is required to be specified, it will be shown on each packaging in RED colour

X	Crates or packages to be stored outdoor without covers
XX	Crates or packages to be stored under tarpaulin
XXX	Crates or packages to be stored in covered or enclosed premises
XXXX	Crates or packages which must be stored in air-conditioned premises

6. Shipment:

6.1 By Sea:

For C & F / CIF Contracts

All shipment of Break bulk material and containerized cargo shall be made by suitable vessels certified for sea worthiness and complying with National / International safety

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regulations .No Trans-shipment is permitted for Break Bulk Cargo. All shipments shall be under-deck unless carriage on deck is unavoidable / permitted by consignee.

6.2 By Air:

Wherever the shipments are to be effected by Air (in case of FCA shipments), the same shall be dispatched through Consolidation Service Agent to be nominated by Owner/EIL.

6.3 Shipping Terms :

All shipping terms will be interpreted in accordance with INCOTERMS 2020 and all subsequent amendments/revisions.

7. Documentation

7.1 All documents shall be in English Language.

7.2 Documents Required Before Shipment

7.2.1 The required Cargo Details (Preliminary) shall be provided by the supplier within the period defined in the P.O. Final Packing List with weight / dimension of individual package shall be provided to EIL/Client at least four weeks before the contractual / actual date delivery at Port of loading.

Transport and lifting arrangement drawings are to be supplied for all Over –Weight and Over-Dimensioned packages as mentioned below or where shipping saddles are being provided. Such drawings must show clearly full dimensions, weights, centre of gravity, lifting and securing points and saddle locations.

7.2.2 The sketches of Over Dimensioned Cargo shall be mailed as follows :

EIL New Delhi - Head Shipping

EIL Port Office at Discharge Port - In-Charge (Shipping)

The Over Dimensioned Cargo shall mean any package exceeding any of the following limits.

Weight - 18 MT
Length - 12 Meters
Width - 03 Meters
Height - 03 Meters

7.3 Documents Required After Shipment

7.3.1 The supplier shall forward copies of the shipping documents as defined in the PO by Email including the following :

1. Commercial Invoice
2. Bill of Lading / Airway Bill
3. Packing List
4. Certificate of Origin (issued by Chamber of Commerce of the country of origin)
5. Inspection Release Note

Shipping Documents should be forwarded to the officials at EIL /Owner defined in the PO including the following:

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a) Project Manager at EIL New Delhi

b) Head (Shipping) at EIL New Delhi

c) In-Charge (Shipping) at EIL Port Office (Port of Discharge)

d) Owner of the Project

In addition to above, complete set of original documents are required to be sent to (OWNER) / Paying Authority through Bank in terms of 'Letter of Credit'.
The supplier shall be fully responsible for any delay and / or demurrage that may become payable at destination Port on account of delay in transmittal of shipping documents as detailed in the Purchase Order.

7.3.2 In case of air shipments one set of non-negotiable documents consisting of Commercial Invoice (ink signed), Packing List, Certificate of Origin, Technical Literature shall be handed over to Freight Forwarder/Airlines with the instructions that the same should be handed over along with cargo arrival notice and copy of Airway Bill to Destination Airport Notify Party.

7.4 BILL OF LADING :

Bill of lading must be 'clean', must be endorsed "shipped on board" and must show details of gross weight and cubic measurement. If shipment is being arranged by the supplier it must also be endorsed "freight prepaid". Bill of Lading shall be made in favor of (OWNER) /Engineers India Limited/or order of bank (and **not order of the shipper**) , as applicable as per the provisions of the PO and the notify column should indicate Engineers India Ltd. (PORT OFFICE).

7.5 COMMERCIAL INVOICE:

Commercial Invoice shall inter alia, indicate (i) PO No. & Date, (ii) Unit prices, (iii) Total Value, (iv) Full description of goods in conformity with the description of goods given in Purchase Order, (v) Inco Terms, (vi) Payment Terms, (vii) Import License No. (viii) Country of Origin (ix) HSN Code (Harmonized System of Nomenclature), (x) GSTIN No of Consignee.

Invoice value shall be for the materials actually shipped. Billing breakup if required for partial shipment shall be freezed and provided before shipment of the first lot of cargo.

In case of CHEMICALS / HAZARDOUS cargo FLASH-POINT should be indicated in all documents and a separate certificate giving composition and flash-point shall be sent.

7.6 PACKING LIST :

Packing lists shall show (i) PO No.(ii) Details of contents of each case including PO line Item number, Tag Number (Including sub-items and description); (iii) Number of packages by type and total number of packages (i.e. package 1 of 5, 2 of 5 and so on);(iv) Gross and net weight per package (including quantity of items per package);(v) Dimensions and cubic measurements per package in metric units
(length, width and height); (vi) Cubic measurements and total gross and net weights of the entire shipment.

Where containers are used, a separate packing list must be produced for each Container. In case of pipes & plates in bundles, no. of pipes / plates with individual length in each bundle must be indicated.

8. SHIPPING ADVICE :

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8.1 Within 24 hours of shipment, the supplier shall send shipping advice by e-mail to officials provided in the PO including the:

1) Project Manager at EIL, New Delhi
2) Head-Shipping at EIL, New Delhi
3) EIL-Port office
4) Owner
5) Insurance Company as detailed in the Purchase Order

Giving particulars of the shipment, vessel's name / Airlines, Flight & Date on which material actually left (and not tentative flight No. and Date), Port of shipment, Bill of Lading / Airway Bill Number & Date, contents in brief, Purchase Order Number, total Invoice and Freight Values, Number of Packages and total gross weight, ETD & ETA of vessel. In case of Air shipment through consolidation services information must contain both Master Airway / House airway Bill Number.

8.2 In case of free replacement / supply of components / parts, the supplier shall intimate by e-mail above dispatch particulars along with specific statement '**Free Supply**' and **Value for customs purposes only**' and particulars of original shipment i.e., vessel name, Bill of Lading Number and date, Invoice Number etc. and send documents to EIL (Port Office, to be obtained separately from EIL) with Invoice bearing this statement.

9. TRANSIT RISK INSURANCE

All equipments / materials shall be insured against all marine and transit risks on warehouse to warehouse basis by owner and the necessary dispatch intimation shall be sent to the underwriters of Owner (as detailed in the Purchase Order) by Supplier. However, the Supplier shall ensure that in effecting shipments clean Bill of Lading is obtained and the carrier's responsibility is fully retained on the carrier so that consignee's interest are fully safeguarded and are in no way jeopardized.

10. SHORT SHIPMENTS

Supplier should thoroughly check all the items packed before shipment. If any item(s) are found short-packed in sound boxes on examination at project site by EIL, supplier shall be responsible to supply short-packed items free of charge (on Delivery Duty Paid at site basis), on receipt of advice from EIL.

11. Seller shall advise freight forwarder to indicate on the Invoice, Packing List & Bill of lading / Airway bill that the subject import into India is as per the provision of EXIM Policy prevalent in India.

12. Other Services to be provided by Supplier

In addition to packing and shipping documentation Supplier must carry out loading including lifting, securing, lashing and stowing of all cases, crates and packages onto means of transportation such as but not limited to trailers, containers etc.

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स्वदेशी सामग्रियों के लिए पैकिंग, मार्किंग, शिपिंग और दस्तावेज विनिर्देश

PACKING, MARKING, SHIPPING AND DOCUMENTATION

SPECIFICATIONS FOR INDIGENOUS MATERIALS

Rev. No	Date	Purpose	Prepared by	Reviewed by	Approved by
2	20.04.2024	ISSUED FOR COMPLIANCE	DDC	DRC	CGM & HOD (Shipping)
1	10-09-2018	ISSUED FOR COMPLIANCE	DDC	DRC	ED (SCM)
0	05-12-2012	ISSUED FOR COMPLIANCE	DDC	DRC	GM (I)

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Abbreviations:

CM	-	Centimeters
EIL	-	Engineers India Limited
E-way bill	-	Electronic Way Bill
Kg	-	Kilograms
FTL	-	Full Truck / Trailer Load
KGS	-	Kilograms
L.R.	-	Lorry Receipt
GR.	-	Goods Receipt
mm	-	Millimetre
MT	-	Metric Ton
NO. / NOS.	-	Number / Numbers
P.O.	-	Purchase Order
RCM	-	Resident Construction Manager

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1. GENERAL

1.1 Purpose

This specification details the minimum requirements for the preservation, packing, marking, shipping and documentation of Products, materials and equipment as specified in the respective Purchase Orders or Contracts. This specification forms an integral part of the Purchase Order or Contract issued. However, whenever specific instructions are detailed in the Purchase Order / Purchase Requisition and are in conflict with this specification, particular instructions mentioned in the individual Purchase Order /Purchase Requisition or Contract shall prevail over this general specification.

1.2 Requirements and Conditions

The following requirements are intended as minimum requirements, and compliance to these requirements in no way absolves or relieves Supplier of any responsibility or obligation outlined in the Purchase Order. Supplier shall ensure compliance to the preservation, packing ,marking ,shipping and documentation guidelines specified in this document.

In all circumstances, the packing will be designed and constructed in order to support materials during transportation as well as to prevent the materials from damage due to impact, extreme climatic conditions, sun and rain. It must be ensured that the materials and equipments are delivered to the job site by sea, road or air, in good condition.

The Supplier shall, at its own cost, ensure items to be transported are carefully packed and protected in accordance with best practice, having due regard to the climatic conditions encountered during the passage, method of carriage and handling / loading / unloading processes. In addition to any of the measures detailed within this Specification, the Supplier shall apply any other measures that, in its experience, are required to safeguard the particular item. The Supplier shall obtain the approval of EIL / Owner for any variation to the packing, marking and shipping requirements outlined in this Specification.

1.3 Responsibility and liability

Supplier shall be held responsible for any damages and / or losses of all and any kind that may occur by not respecting these specifications. Owner / EIL reserves the right to reject any packing when the packing does not conform to these specifications / instructions and / or when the packing does not ensure perfect protection of the goods and materials. Supplier is responsible for the weights and dimensions declared and the marking of the packages. Supplier will be held responsible in the event goods and materials becoming useless, broken or damaged as a result of poor packing and / or stowing or due to corrosion because of insufficient or inadequate protection. All direct and indirect costs resulting thereof will be back charged to Supplier.

2. CLEANING AND PRESERVATION

2.1 Cleaning

All equipment, materials and parts shall be thoroughly cleaned inside and outside and shall be free from grease, oil, weld spatter, rust and all other foreign matter prior to preservation.

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2.2 Preservation

Articles may be exposed to severe environmental or climatic conditions, moisture and dust. All materials and equipment shall be packaged suitable to prevent damage and deterioration during transportation and storage. Where damage occurs due to inadequate packaging of items, the liability for costs associated with rectification of the damage will be to the Supplier's account. All metals subject to corrosion shall be treated with a corrosion preservative suitable for the purpose intended. Products susceptible to corrosion must be packaged in a dry non-corrosive environment for the duration of shipment and storage, for a minimum of 1 year or any other higher duration specified in the PO/PR. All bright and machined parts shall be coated with a recognized rust preventative suited to the particular application concerned. All internal parts of machinery shall be treated with lubricant containing rust and oxidation inhibitors to protect equipment from any possible damage. Such lubricants shall be compatible with those which will subsequently be used in service and shall be identified by appropriate tagging. Electrical equipment and instrumentation shall be packed with a suitable desiccant. Delicate equipment such as instruments, electrical switchboards and panels etc. shall be packed for protection to eliminate the effects of vibration.

Wherever necessary, desiccant packs shall be kept to avoid excessive moisture in the packing.

3. PACKING

3.1 General

The instructions herein shall be considered as general directives and minimal requirements, which are applicable to the packing of all equipment and materials. The Supplier is responsible for the correct and adequate packing of the equipment and materials so that these equipment and materials will arrive at destination undamaged and the packing itself in such a condition that it will be suitable for a minimum of 1 year storage or as specified otherwise.

3.2 Packaging Materials

All packaging together with packaging and protective materials shall be new, maintain its integrity and perform its intended function while being transported, handled and stored.

The quality of packing shall provide maximum protection against damage, breakage and pilferage during transport, storage and multiple handling, including handling by hoisting, lifting devices and / or forklift trucks. Material used for packaging, packing, wrapping, sealers, moisture resistant barriers and corrosion preservatives shall be of recognized brands and grades and shall conform to the best world standards.

Packaged Products showing any damage, defect or shortage resulting from improper & inadequate packaging, packaging materials or packing procedure or having concealed damage or being short at the time of unpacking shall be subject to rejection and be replaced at the Supplier's cost

3.3 Packing requirements

3.3.1 Wooden Boxes and Crates

Interior support board shall be of strength to withstand multiple handling. Tops of crates shall be one piece wherever possible to avoid seepage through cracks; otherwise a top coating is required. Waterproof lining shall be used for sides, ends and top of crates, proper venting of cargo boxes containing machinery is required, as well as sufficient use

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of desiccants. Crates shall be diagonally braced on all faces and suitable for hooks, slings and forklifts. Heavy items shall be secured with wood braces. Fragile items shall be cushioned. Material packed in large boxes shall be layered between plywood sheets to maintain load integrity during transit. Banding shall be used on all boxes to prevent distortion / deformation of the box.

3.3.2 Pallets

When equipment and/or materials are packed on pallets (wood or synthetic), these should be solid double deck pallets that provide adequate load support during transportation and storage (under not always ideal conditions). The pallets should have a dynamic load capacity, enough to carry the mass loaded on the pallet. Where feasible, the top surface of the pallet must be flat. The pallet design must enable safe handling by forklift, cranes etc. and storage on rough surface. Pallets shall be covered with wrapping. All corners, horizontal and vertical shall be protected with cardboard protection strips. The pallet must be tide on all sides with steel or synthetic straps.

3.4 Packaging

All equipment and materials shall be properly fixed (by bolts, clamps, supporting beams, etc.) in such a way that internal movements and / or loosening is impossible. Under the top cover (roof) depending on the case and crate length, sufficient number of strong beams shall be placed and properly fixed in order to allow stacking of the cases and crates avoiding any compression. Equipment parts and materials which may be subject to damage by vibration and /or shock must be protected using shock-absorbing material. All equipment and materials which may be damaged by moisture shall be packed in airtight bags in which sufficient desiccant material (e.g. silica gel) is placed. All openings on the equipment must be closed with wooden / metal or plastic covers to prevent damage to the openings and interiors. Fragile and loose parts easily damageable pertaining to the equipment must be securely and properly packed in a separate case.

3.5 Waterproofing

Cases including the cover shall be internally lined with a strong type of waterproof paper or plastic foil. Equipment and materials shall always be packed in a foil (polyethylene or aluminum) for extra (double) protection against rainfall. Those foils shall be applied in such a way that they are self draining.

3.6 Hazardous cargo

The hazardous materials shall be packed in accordance with and in cognizance to the applicable rules, regulations and tariff of all Governmental Authorities and other Governing bodies. Hazardous materials shall always be packed and documented separately from any other material. It shall be the responsibility of the seller of hazardous materials to designate the materials as hazardous and to identify each material by its proper commodity name and its hazardous materials class code. Safety and emergency procedures shall be displayed outside the package. Any certificates required for transportation or for statutory authorities as applicable, needs to be provided before shipment of the goods.

4. GUIDELINES FOR PACKING GOODS

In subsequent paragraphs details of different types of packing for different types of goods are defined. Supplier shall make packing details / procedure based on the applicable guidelines

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Chemicals in powder form, catalysts, refractories & like materials etc. shall be packed in drums only.

4.1 Pipe

All pipes 2" included and below shall be packed in crates.. Pipes over 2" up to 6", shall be bundled and banded in bundles of uniform length. Bundling is carried out with U-IRON or traversal planks, joined with threaded connecting rods with locknuts.. Bundle weight shall not exceed 2,000 kg. All pipes are to be capped and ends sealed with waterproof tape (tape is not necessary if end caps are of the pre-shrunk or self-sealing type).Pipes larger than 6" shall be shipped as single lengths with the ends capped. End caps are to be of the recessed type to enable the use of soft faced hooks, but still completely sealing the end and also protecting the weld. All stainless steel / non-ferrous piping must be packed separately in wooden crates. Any banding of bundles is to be with the same material. The bundling and packing of pipe and instrument tubing shall enable the safe discharge of pipe on site using clamps and forklifts. All pipes shall be supported along their lengths to prevent bending / flexing during transport. During loading / unloading slings shall be applied to the center of the load as well as on each end to prevent bowing.

Pipe and rigid conduit smaller than DN50 diameter shall be bundled in units not to exceed 1000 kg. Threaded and coupled pipe shall be equipped with plastic thread protectors. All material shall be segregated and shipped by generic material type to prevent cross contamination. Where wire rope or chains are used, adequate padding shall be used at points of contact with pipe. Care must be taken to prevent any chafing of pipes against each other or against the metal structures of the vehicle during transportation. Where necessary, such metal structures must be padded with planks or plastic tubes. Skids and dunnage must be used between the bundles in transit as well as in the storage of coated pipes.

4.2 Pipe Fittings, Flanges, Valves and Gaskets

All pipe fittings, flanges and valves up to 6", are to be packed in cases / crates. For items over 6", these may be fixed securely to a pallet base and enclosed in a crate, for protection. All flange faces / bevel ends shall be suitably protected with plastic caps / end protectors. Where valves have actuators attached, rigidity must be ensured for the valve and actuator. The vulnerable parts of the actuator are to be completely protected within a wooden crate. Empty spaces shall be filled with expanded PU foam to restrict movement in the crate. All stainless steel fittings, flanges and valves of all sizes, must be packed separately in wooden crates. Any strapping is to be with the same material. Gaskets are considered fragile and shall be treated as such. Individual gasket sizes shall be boxed and labeled separately.

All threaded fittings and pipes should be greased and provided with plastic caps.

4.3 Steel Structure and Plates

Structural steel sections and plates shall be strapped in bundles of convenient size and weight for handling. Rolled and shaped plates shall be provided with suitable bracing to eliminate distortion during transit, and shall be bundled in uniform lengths. Each bundle shall be marked with a metal tag, hard stamped, secured under steel wrapping.

4.4 Itemized Equipment

Units or parts belonging to main equipment but separately packed shall be clearly marked for easy identification with the main equipment to which they relate.

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All gasket face of flanges, machined working surfaces and threaded parts of all equipment shall be covered with rust preventive tape or by application of oil based alkyd primers or zinc bases epoxies or thin zinc silicate coatings specially formulated for the preservation of CS and Alloy Steels. All flanged connections of vessels shall be protected by metal plates correctly casketed by wooden plugs or plastic caps suitably secured in position.

Vessels shall, where possible, be packed on skid constructions and secured with adjustable steel straps. Manholes and other major openings shall be protected with cover flanges or metallic plates firmly secured. Smaller openings shall be closed with plastic plugs / caps.

All vessel internals and items not installed by Supplier at works including accessories such as small parts, bolts, nuts, gaskets, etc. shall be packed in wooden cases separately for each vessel or apparatus and marked with the same item number as the vessel / apparatus in order to protect all parts from loss or damage in transit. Internals, bolts and gaskets for service / testing operations shall be supplied with the vessels / items by Supplier and all internals shall be boxed separately and marked according to marking procedure.Each item shall be supplied correctly and identified for field installation by others.

All vessels / heat exchangers or items of such construction shall be dried, thoroughly cleaned inside and be free of all dirt and loose foreign materials. The equipment shall be filled with Nitrogen. Make up arrangement for loss of Nitrogen along with a pressure gauge shall be installed.

All commissioning spare parts shall be packed separately and marked with the relevant main item number.

Pumps, compressors, rotating equipment, turbines and motors will require specific packing and preservation as per the relevant Technical Specification. For skidded equipment openings, flange faces, threaded connections, wires, valve stems, and other component parts that may be subjected to mechanical damage or corrosion shall be adequately protected. This protection shall be applied to all components, both those removed and boxed and those remaining in place on the skid assembly. Each skid shall have one box strapped to it containing a complete set of drawings together with a manual covering installation and operating instructions and other pertinent instructions required for reassembly of components that were disassembled for shipment.

4.5 Control Panels and Electrical Devices

Equipment such as control panels, instruments and electrical devices shall be packed in an interior moisture / vapor-proof barrier with silica gel or comparable desiccant. Desiccants shall be bagged to avoid dispersing in containers. The quantity of desiccant shall be calculated in accordance with the manufacturer's recommendations. Equipment must be secured to the case with bolts, blocks or straps. Adequate precautions (for example, shaft locks to prevent longitudinal / rotational movement of rotor shafts in motors) shall be included in the packaging of all equipment which has plain, ball or roller bearings so as to minimize the risk of bearing damage.

4.6 Instruments

Instruments shall be thoroughly clean, dry and free from rust and individually wrapped using polythene sheets / U foam / Thermocol sheets depending upon the items and then packed in wooden boxes. The left out spaces and top of the boxes should be filled with rubberized coir to get proper cushioning effect. Special attention shall be paid for arresting movements of their operating mechanism during transportation. Silica gel or

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desiccant (with recognized brands / grades) shall be strapped inside but shall not come into contact with the paintwork.

4.7 Cables

All electric cables to be packed in new cable drums made of steel and painted with epoxy resin paint. Cable ends to be carefully protected before packing. Polythene sheet should be wrapped over the cables and sealed properly. Cable drum can be put in wooden crates for ease in handling and transportation.

4.8 Saddles, Supports, Spiders and Lifting Equipment

All items which cannot be transported without independent supports must be supplied with Shipping saddles suitable for land and / or ocean transit. Such transport saddles are to be included within the scope of supply. Supplier is to advise of any requirement for lifting beams or other specialized lifting equipment and will include provision for use of such equipment for loading purposes. The Supplier is responsible for ensuring that all modules and oversize items are adequately braced and where required, plastic wrapped suitable for transport. Modules and oversize items shall be packaged to prevent damage during transport.

4.9 Assortment Of Package / Spare Parts for Erection and Commissioning

Equipment and / or parts of different item numbers shall not be packed together in the same package. Small goods such as accessories, spare parts for erection and commissioning and special tools shall be packed separately in respective inner boxes with tags or labels attached there, being clearly indicating their contents. In case such accessories, spare parts and special tools are packed in separate boxes / crates, item no. of main equipment shall be clearly mentioned in Main Shipping Mark for easy identification.

5. MARKING

5.1 General

The purpose of the marking is to identify the packages and detail the weight and dimensions to assure efficient and correct handling during transport and upon arrival at destination.

5.2 Marking Instructions & dispatch details

Packages and crates will be marked with indelible black paint. Marking must be perfectly legible. All packages shall be clearly and properly marked in English language if not otherwise specified.

The shipping marks, shall be stenciled on two sides and one end marked with clear characters at least 5 centimeters high (where crate size permits, otherwise use optimum size for each package dimension).

The texts shall be printed by means of stamps, stencil-plates or electronically. The use of stickers is not allowed, unless securely covered by plastic. Bundles shall be marked by embossing on two metal tags bearing the shipping marks and placed on each side of the package and securely attaching them to the goods. Paint shall be used on metal surfaces.

Labels or tags to be clearly visible and shall be of a quality to remain visible and remain attached during transit, handling and storage for a minimum period of 12 Months.

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Crates containing fragile articles must be packed with special precaution against risk of breakage and must be stenciled on all sides "FRAGILE - HANDLE WITH CARE". Where crates are not to be overturned, Supplier must show on the crates, clear and readily visible identification, to ensure they are kept in the correct position.

Packages / equipment of 2,000 kg or more must be marked with slinging points on all sides, in addition to the centre of gravity marks.

Number packages consecutively i.e. 1 of 10, 2 of 10, etc. Do not duplicate package numbers. SUPPLIER is responsible for any loss or damage caused by incorrect marking.

All cases/crates shall also be marked with the appropriate international standard graphic symbols for handling.

As a minimum, all cases/crates are to be marked clearly on all four sides with:

"HANDLE WITH CARE" "RIGHT SIDE UP" "KEEP DRY"

In the case of packages with a single gross weight totaling 2,000 kg and / or a height of more than 1m, the centre of gravity shall be clearly marked with the symbol on two adjoining sides. For all items of equipment with an eccentric centre of gravity, this symbol shall be marked at the bottom, side and top of the package.

The slinging and lashing points shall be marked with a chain symbol.

When packing in cases / crates, these packages shall also have metal corners at the slinging points.

External front and rear sides of the boxes shall be planed for writing instructions. To facilitate identification, the required colour coding as per the specifications shall be carried out on each package and on corners of pipes & plates.

In case of bundles or other packages wherever marking cannot be stenciled, the same shall be embossed on metal or similar tag and wired securely at minimum two convenient points and both ends shall be protected / covered with gunny bags upto 18" (Eighteen Inches). In case of loose pipes, sticker of above markings should be pasted on inner wall corner of each pipe on both sides

Dispatch details such as consignor / consignee address, contract and case details, stacking instructions shall be written on one side of the boxes. One copy of packing slip wrapped in polyethylene bag covered with aluminum packing slip holder to be nailed on the external surface of the box. A packing list and preservation instructions shall be enclosed in a clear weatherproof plastic re-sealable envelope stapled to the box such that the receiver may determine contents without opening the container. An additional packing list is to be enclosed in a clear waterproof plastic re-sealable envelope stapled inside the container. Stapling of the envelopes shall not prevent removal of the documents.

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5.3 Shipping Marks

Each package shall be marked on three sides with proper paints / indelible waterproof ink as follows:

(OWNER)

PROJECT
WITH COMPLETE
ADDRESS

(DESTINATION)

PURCHASE ORDER NO. ----------

NET WEIGHT ---------- KGS. GROSS WEIGHT ---------- KGS.

DIMENSIONS ---------- X ---------- X ---------- CMS

PACKAGE NOS. (SL. NO. OF PACKAGE) OF (TOTAL NO. OF PACKAGES)

TAG / ITEM NO. ----------

SUPLLIER'S NAME----------

The details of the Owner / Project are defined specifically in the Purchase Order / Contract.

5.4 Storage Code

The type of storage required is required to be specified, on each packaging in RED colour as follows:

X	Crates or packages to be stored outdoor without covers
XX	Crates or packages to be stored under tarpaulin
XXX	Crates or packages to be stored in covered or enclosed premises
XXXX	Crates or packages which must be stored in air-conditioned premises

6. SHIPMENT

Dispatch of material shall be made in accordance with the relevant terms of Purchase Order. Name of the owner, Project, location and other relevant information shall be as per the relevant annexure(s) to the Purchase Order / Contract.

Any change in mode of transport shall be resorted to only after prior approval in writing from EIL / Owner. Supplier shall ensure dispatch of equipment / materials immediately

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after they are inspected and released. All consignments should be booked in the name of 'owner' and not under 'self' basis.

6.1 Dispatch By Road:

a) The Materials shall be dispatched on Door-Delivery basis (smalls or FTL) through a registered transporter.

However, in case, the transporter is nominated by EIL / Owner, the goods shall be dispatched through the same only.

b) The supplier shall ensure with Transport Company the delivery of materials within a reasonable and minimum transit period. A complete set of dispatch documents (Delivery Challan / Invoice / Packing List / Test Certificate / L.R. / E-way Bill number etc.) shall be sent to concerned officials of EIL / Client (as specified elsewhere in RFQ/PO).

6.2 Shipment By Air:

Whenever supplier is instructed by EIL/ Owner to airfreight any material, the supplier shall take prompt action for the same. Immediately after air-shipment is effected, the vendor shall intimate by e-mail, the details of Airway Bill number and date, the flight No., Number of packages etc. to concerned officials of EIL / Client (as specified elsewhere in RFQ/PO).

6.3 Destination:

The consignments should be dispatched to the Consignee / Address as detailed in the Purchase Order.

6.4 Advance Information:

Immediately after a shipment is made supplier shall intimate Underwriter, other concerned officials of EIL / Client (as specified elsewhere in RFQ/PO) vide mail regarding particulars of materials, value, Purchase Order No., date of dispatch, L.R. number, E-way Bill No., truck no., name of Transport Company.

6.5 Transmission of Dispatch Documents :

Supplier shall, within 48 hrs. of the dispatch of the materials depending upon the payment terms of the Purchase Order, either negotiate through Owner's / EIL's Bankers (as applicable) or forward directly, by Courier the complete set of dispatch Documents to Owner / EIL. as applicable in line with the PO terms & conditions. The supplier shall be responsible for any delay in clearance of the consignment at destination and consequent wharfage / demurrage, if any, due to delay in transmittal of the required documents.

7. TRANSIT RISK INSURANCE

All equipments / materials will be insured for transit risk by (Owners) unless otherwise specified. The insurance cover will be provided from warehouse-to-warehouse.

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SELF DECLARATION OF CONFLICT OF INTEREST

Job Name:

RFQ No.:

Terms & Conditions in respect of "Conflict of Interest" in the bidding process:-

A bidder shall not have conflict of interest with other bidders. The bidders found to have a conflict of interest shall be disqualified.

A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

a) they have controlling partner(s) in common; or
b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
c) they have the same legal representative/agent for purposes of this bid; or
d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
e) bidder participates in more than one bid in this tender. Participation by a bidder in more than one bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid.
f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:

   1. The principal manufacturer directly or through one Indian agent on his behalf; and [in case of receipt of bids from both the Indian agent & the principal, the principal manufacturer shall be approached to arrange for withdrawal of one of the bids; in case of non-withdrawal, the bid from the principal manufacturer shall be considered]

   2. Indian/foreign agent on behalf of only one principal.

g) a bidder or any of its affiliates provided the consultancy (through another contract) in the preparation of the design or technical specifications of this supply/contract;
h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business.

SELF DECLARATION OF CONFLICT-OF-INTEREST FREE BID

I am / We are participating in this tender (whole or part of the tender against which separate contracts will be awarded to individual bidders), taking note of the above terms & conditions and hereby declare that there is no other participating bidder in the same (whole or part ofthe tender), which may create conflict of interest as described above, to the best of our knowledge and understanding.

I/We understand that in case any conflict of interest is found to have occurred, NRL will disqualify the bids from the bidders deemed to have conflict of interest.

I / We further declare that in case I / We observe that any conflict of interest is found to have occurred after the unpriced bid opening, I / We shall immediately inform NRL in writing regarding such conflict of interest **within 2 days** from unpriced bid opening; and NRL shall have the right to disqualify the bids from the bidders deemed to have conflict of interest.

It is understood that any wrong declaration / non-declaration in this context shall make me / my agency / company liable for further action under Holiday Listing procedure of NRL.

_____

(SIGNATURE OF BIDDER)

Date:

Place:

Job Name :

RFQ No. :

SELF DECLARATION OF DEBARMENT / BLACK LISTING / HOLIDAY LISTING & ALLIED FIRMS

(1) **SELF DECLARATION OF DEBARMENT / BLACKLISTING / HOLIDAY LISTING**

I/We hereby declare that I am / we are currently not serving any holiday listing/black listing/debarment orders issued by Numaligarh Refinery Limited (NRL) or Engineers India Limited (EIL) or Ministry of Petroleum & Natural Gas (MoPNG) debarring me/us from participation in tendering or carrying on business dealings with NRL/MoPNG.

I/We understand that bids from the bidders who are on holiday list by NRL or MoPNG will not be considered.

It is understood that any wrong declaration in this context shall make me / my agency / company liable for action under Holiday Listing procedure of NRL.

Note: "Ministry of Petroleum & Natural Gas (MoPNG)" is the Administrative Ministry of NRL and the term in this context shall mean the ministry itself and not the other PSUs or Departments under it.

2) **DECLARATION OF ALLIED FIRMS OF THE BIDDER**

I/We hereby declare that following are my/our allied firm(s) (*as defined in NRL's holiday listing policy*): -

Name(s), PAN and GST number(s) of our allied firms are as follows: -

Sl. No.	Name of Allied Firm	PAN	GSTN

It is understood that in case of debarment of me / my agency / company by NRL, the debarment shall be automatically extended to my/our allied firms.

_____

(SIGNATURE OF THE AUTHORISED SIGNATORY OF BIDDER)

Date:

Place:

Note: *Please refer NRL's current "Policy for Holiday listing/ Banning/ Debarring of Contractors/ Suppliers" available in NRL website* www.nrl.co.in *for details.* [www.nrl.co.in → Tenders → Download Manuals → Holiday Listing Policy]

NUMALIGARH REFINERY LIMITED
General Purchase Conditions (Indigenous) - 2024
(Effective from 09.09.2024)

Definition:

1. 'NRL'/'Owner' means 'Numaligarh Refinery Limited'

2. 'Vendor'/'Contractor' means a Person or Firm or Company, to whom the order is addressed, for supply of goods and/or services.

3. Banker: Unless otherwise specified, NRL's banker at Numaligarh shall be: State Bank of India, NR Complex, P.O. NR Project, Pin: 785699, Dist. Golaghat, Assam. Bank Code: 5377.

Unless otherwise specified, the following Terms & Conditions shall be applicable for supply of goods.

1	**Price Basis:**	Prices are to be quoted on FOR NRL Site, Numaligarh basis (or, FOR NRL Guwahati/New Delhi/Calcutta/Siliguri/Paradeep basis, as the case may be) showing break-up of taxes, duties, packing & forwarding, freight, third party inspection (if applicable) and transit insurance charges, (all in % age).
1(A)	**OEM/Authorised Dealer/Agents of Supplier:**	When a bidder sends quotation for an item manufactured by some different company, the bidder is also required to attach, in its quotation, the manufacturer's authorisation certificate and also manufacturer's confirmation of extending the required warranty for that product as per formats given in RFQ/NIT. However, manufacturer's authorisation / confirmation may not be required for Commercially-Off-the-Shelf items, unless specifically mentioned in the RFQ/NIT. In cases where the manufacturer has submitted the bid, the bids of its authorised dealer / distributor / channel partner will not be considered and EMD (if any) will be returned. And in case of violations, both infringing bids will be rejected.
2	**Firm Price:**	Quoted prices shall remain firm and fixed till complete execution of the order. NRL is not liable for any claim from the supplier on account of fresh imposition and/or increase (including statutory increase) in excise duty, custom duty, GST, and any other tax, duty or other levy on raw materials and/or components used directly in the manufacture of the contracted goods taking place during the pendency of the contract, unless such liability is specifically agreed to in terms of the contract.
2(A)	**Suo motu discounts and rebates after opening of the tender:**	If a bidder offers suo motu discounts and rebates after opening of the tender (techno-commercial or financial), such rebates/discounts shall not be considered for the purpose of ranking the offer but if such a firm does become L1 at its original offer, such suo motu rebates will be incorporated in the contracts by NRL.
3	**Payment Term:**	Unless otherwise specified/agreed, the payment term shall be "100% within 30 days of receipt and acceptance of goods at site subject to submission of Contract Performance Security (CPS) and Warranty Bank Guarantee (WBG), as applicable.
4	**Weights & Measurements:**	All weights and measurements recorded by NRL on receipt of materials shall be treated as final and binding. Qty. Tolerance @±0.05% (up to 20 MT) and Tolerance @± 0.03% (beyond 20 MT) for weigh bridge scale variation (Class- III) shall be permissible.
5	**Qty. Tolerance:**	For items like Structural Steel, Plates, Tor Steel, Cement, Bulk Chemical 5% qty tolerance by weight and for Cable and Pipe materials 5% qty tolerance by length shall be permissible. Payment will be made on actuals within the tolerance limit.
6	**Transportation:**	Unless otherwise agreed upon, transportation of goods up to the specified destination shall be in Vendor's scope.

		The materials to be dispatched through a transporter registered as per Carriage by Road Act 2007 and Carriage by Road Rules 2011. The Consignment Note/ Lorry receipt must carry the registration number as per the rules stated in The Carriage by Road Rules, 2011. Material shall be delivered in a truck/vehicle having valid documents like Vehicle Registration Certificate, Insurance Certificate, Pollution Under Control Certificate, Fitness Certificate. The vehicle shall not be overloaded and drivers shall have valid driving license. E-way bill to be generated by vendor/vendor's nominated transporter for movement of goods/materials as per Rule 138 of the CGST Rules, 2017 issued by Central Board Of Indirect Taxes & Customs and any subsequent amendment thereafter.
7	**Despatch:**	Unless otherwise specified, all LR/RR etc. must be in the name of Numaligarh Refinery Limited and not 'Self'. Any demurrage or wharfage paid by NRL to the carriers due to consignments being booked as 'Self' will be recovered from the vendor. No consignment shall be booked on 'Said to Contain' basis. If so, it will be at vendor's own responsibility and risk.
8	**Packing, Marking, Shipping & Documentation:**	All consignments must be securely and appropriately packed and should conform to Standard Material Transport Regulations. The vendor will be held liable for any damages to the goods due to insufficient or defective packing as well as for corrosion due to insufficient protection. Each package shall be clearly marked with indelible paint with the Purchase Order No., From (Name & Add.), To (Name & Add.), Destination, Item Net & Gross Weight, Case No. (Sl. No. of Total Cases) & Dimensions, and shall contain copies of despatch documents and packing list. Details given in the "Packing, Marking, Shipping and Documentation Specification. for Indigenous Materials" - wherever enclosed with a Purchase Order shall be strictly followed. For chemicals, MSDS should be a part of transportation documents (the document should specifically mention the conditions for material storage). In case the Chemical is hazardous in nature, it should be legibly recorded on the body of the Drum/ Can as applicable.
9.1 A	**Test Certificate:**	Test certificate of representative samples conforming to PO specifications from the manufacturer/Govt. approved laboratory/NRL nominated agency must be furnished along with supplies. In case of 3rd Party Inspection, the Inspection Reports must accompany all despatch documents as well as supplies. Further, shelf-life certificate to be submitted if applicable for the items.
9.1 B	**Shelf Life Certification:**	Shelf Life for Material / Chemicals / Consumables to be declared based on applicability of the same. A certificate to this effect should be submitted separately certified by competent authority. This is mandatory for all such procurements which become eligible under this broad head.
10	**Guarantee/ Warranty:**	10.1. Materials shall be guaranteed against manufacturing defects, materials, workmanship and design for a period of 12 months from the date of commissioning or 18 months from the date of last dispatch whichever is earlier. Warranty for replacement of material/ accessories should be provided free of charges at our premises. The above guarantee/warranty will be without prejudice to the certificate of inspection or material receipt note issued by us in respect of the materials. 10.2. All the materials including components and sub-contracted items should be guaranteed by the vendor within the warranty period mentioned above. In the event of any defect in the material, the vendor will replace / repair the material at NRL's concerned location at vendor's risk and cost on due notice. 10.3. In case, vendor does not replace / repair the material on due notice, rejected material will be sent to the vendor on "Freight to pay" basis for free replacement. Material after rectification of defects shall be dispatched by the

		vendor on "Freight Paid" basis. Alternatively, NRL reserves the right to have the material repaired / replaced at the locations concerned, at the vendor's risk, cost and responsibility. 10.4. The Vendor shall provide similar warrantee on the parts, components, fittings, accessories etc. so repaired and / or replaced. 10.5. The replacement goods/services shall follow the same Quality Assurance Plan.
11	**Insurance Charges:**	11.1 Transit insurance shall be in the scope of vendor where delivery basis requirement is 'FOR NRL Site'. 11.2 Only when specifically mentioned in enquiry that delivery basis requirement is 'Ex-works' and transportation by NRL; in those cases only Transit Insurance shall be in NRL's scope. In such instances, vendor shall intimate dispatch details and value of goods in advance over e-mail for transit insurance coverage.
12	**Bank Charges:**	Unless otherwise specified, in case of payment through bank, respective bank charges shall be to respective account.
13	**Offer Validity:**	The vendor's offer shall be valid for acceptance for a period of 90 days from the final due date of the enquiry. In case the Tenderer revokes/cancels/varies/withdraws his tender within the above period, the OWNER shall have the right to forfeit the EMD, if any, without any further notice to the tenderer. In case of such revocation or cancellation or variation by the Tenderer, without the consent of the OWNER, the OWNER shall have the right to put the tenderer on holiday list, barring the tenderer from participating in any tender for future tenders.
14	**Taxes & Duties:**	All vendors shall have valid GST registration in the concerned State as applicable and vendor shall quote their GSTIN number in the quotation wherever required. 14. 1 **GST**: 14.1.1 GST extra as applicable at the time of delivery within scheduled delivery period will be payable by NRL against documentary evidence. Vendor shall mention in their offer, the percentage of GST applicable at present. Any upward variation in GST rates, beyond the contractual delivery period, shall be to vendor's account. 14.1.2 In case GST is not applicable at present: In case GST gets levied due to change in turnover of Vendor, shall be borne by the vendor. If GST becomes applicable due to change in the law in future, the same will be borne by vendor subject to 14.1.1. In case of change in stand of vendor about applicable rate of GST towards higher side, the same will not be payable. 14.1.3 Owner shall take Input Tax Credit of the GST paid on the material supplied for both GST and cess component as applicable and accordingly GST / Cess should be quoted separately wherever applicable. Vendor shall ask the transporter of the goods to hand over the copy of GST invoice (transporter's copy) at the time of delivery of goods at owner's site. The vendor shall take steps viz. mention relevant GSTIN of NRL in GST invoices and returns, uploading invoice in GSTR 1, payment of the tax liability on the said invoices and filing of Returns etc. and comply with all the requirements of applicable laws including GST laws for the time being in force to enable the OWNER to avail tax credit/s including input tax credit. Any loss or non-availability of input tax credit by the OWNER due to non-compliance of applicable tax law including but not limited to GST laws in force or otherwise, on the part of VENDOR, an amount equivalent to any tax liability accruing to the OWNER and/or to the extent of any loss accrued to the OWNER due to the non-availability of input tax credit or any liability accrued to the OWNER shall either stand cancelled or deducted from the payment due to the VENDOR or shall be reimbursed by the VENDOR as the case may be till such default

		is either rectified or made good by the VENDOR and the OWNER is satisfied that it is in a position to claim valid input tax credit within the timelines as per applicable laws. Any cost, liability, dues, penalty, fees, interest as the case may be which accrues to the OWNER at any point of time on account of non-compliance of applicable tax laws or rules or regulations thereof or otherwise due to default on the part of VENDOR shall be borne by the VENDOR. An amount equivalent to such cost, liability, dues, penalty, fees, and interest as the case may be shall be reimbursed by the VENDOR within 30 days. Any GST as may be applicable on such recovery of amount shall also be borne by VENDOR and same shall be collected by the OWNER. NRL's …… Range : Bokakhat Division : Jorhat Commissionerate : Dibrugarh PAN : AAACN6984B GSTN : 18AAACN6984B1ZD (Assam) 19AAACN6984B1ZB (WB) 21AAACN6984B2ZP (Odisha) 07AAACN6984B1ZG (Delhi) 07AAACN6984B2ZF* (*Input Service Distributor Delhi)
15	**Delivery Period, Delayed Delivery & Liquidated Damages:**	15.1 The time and date of Delivery of Material(s) as stipulated in the order shall be strictly adhered to on the clear understanding that the Price(s) of the Material(s) has/have been fixed with reference to the said Delivery date(s). 15.2 The inability of vendors to execute orders in accordance with the agreed/quoted delivery schedule will entitle NRL, at its options, to: 15.2.1 While granting extension of the delivery period, where the delivery of goods or any part thereof is accepted after expiry of the original delivery period, NRL may recover from the vendor, the LD a sum equivalent to 0.5% (half percent) per week or part thereof of delay. The total liquidated damages shall not exceed 5% (five percent) of the total value of the goods. However, if delivery of goods (including installation & commissioning) in a staggered/splitable manner is possible and permissible, then, the LD imposed would be on the value of the portion of the delayed goods. If the contract involves assembling/ integration/ commissioning of all the ordered goods to get the desired product/output, then, the LD imposed would be on the total order value of goods. Compensation for loss on account of late delivery (actually incurred as well as notional) where loss is pre-estimated is termed as LD. There is no need to establish actual loss due to late delivery. Liquidated Damages (LD) for delay / late delivery shall convey the same meaning as Price reduction clause (PRC) for delay / late delivery. Where any delay in delivery is due to default by the seller/contractor, any increase in statutory duties and/or upward rise in prices due to the price variation clause (PVC) and/or any adverse fluctuation in foreign exchange during the extended/delayed delivery period are to be borne by the seller/contractor. This will be over and above levy of LD/PRC. However, the purchaser reserves his right to get any benefit of a downward revisions in statutory duties, PVC and foreign exchange rate during the extended/delayed delivery period. Thus, PVC, other variations and foreign exchange clauses operate only during the original delivery period. 15.2.2 Cancel the order in part or full and purchase such cancelled quantities from elsewhere on account at the risk and cost of the vendor, without prejudice to its right under 15.2.1 above in respect of goods delivered.

		Note: a) In case of package items (ordered as a complete system), the price reduction for delayed delivery shall be applicable on the entire order value of that package and not on the value of the undelivered portions (even though a billing breakup has been approved). b) In case of purchase of bulk items where tolerance limit is specified (e.g. pipes, cables etc.), price reduction clause shall be applicable on the actual quantity supplied, within the tolerance limit, instead of Purchase Order quantity. **Prior approval from NRL to be taken if the party plans to deliver the material in parts / partial shipment basis in case the same is not clearly mentioned as allowable in the Purchase Order.**
16	**Repeat Order:**	Repeat Order shall be acceptable to the vendor within 6 months from the date of the Basic Order at the same prices, terms & conditions as that in the Basic Order.
17	**Part Order:**	Part Order shall be acceptable to the vendor. However, the quantity mentioned in the enquiry documents for each item shall be ordered on one vendor. All applicable lumpsum charges, if any, shall be pro-rata on value basis.
18	**Changes in Terms & Conditions:**	NRL reserves the right to make changes at any time in quantities of items ordered or in specification and drawings. If such changes cause an increase or decrease in the amount due or in the delivery period, an equitable adjustment shall be made. Any claim for adjustment under this provision must be assessed within 10 days from the date when the changes are ordered by NRL.
19	**Right of Rejection:**	NRL reserves the unfettered right to reject any or all offers without assigning any reasons thereof.
20	**Settlement of Disputes:**	20.1 **FOR SETTLEMENT OF DISPUTES BETWEEN COMPANY and THE PARTY, OTHER THAN CENTRAL PUBLIC SECTOR UNDERTAKINGS** All disputes of difference whatsoever which shall at any time arise between the parties hereto touching or concerning the works or supply or the execution or maintenance thereof of this contract/supply or the rights touching or concerning the works or the execution effect thereof or to the rights or liabilities or the construction meaning , operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after completion of the Contract/supply or whether before or after determination, foreclosure or breach of the contract/supply (other than those in respect of which the decision of any person is by the contract/supply expressed to be final and binding) shall be endeavoured to be amicably settled by the parties in the following manner: a. At the first instance by the Engineer-In-Charge/ Purchase Officer b. At the second instance by the Chief Executive of NRL (Presently Managing Director) or authorised representatives of Chief Executive of NRL. c. Parties may opt for conciliation under Arbitration and Conciliation Act 1996 as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof. d. In case party raising the dispute is not satisfied of the dispute by the aforesaid process and/or the dispute is not resolved by mutual agreement and put in writing within 3(Three) months or within such further period as may be mutually agreed from the date the dispute arose, the matter and/or dispute will be then referred to Arbitration and such disputes and/or difference will be resolved through Arbitration according to Arbitration clause mentioned herein below.

e. However the option of amicably settling the dispute will be open at any time during and post arbitration or during pendency of any court proceeding, arising out of such Arbitration, and is pending before any Court or Tribunal or in any other judicial forum and/or before or after award, order, judgement etc. passed by arbitrator(s), court(s), tribunal(s) or any other judicial forum(s).

20.1.1 ARBITRATION CLAUSE:

i. Any dispute or difference of any nature whatsoever, any claim, cross-claim, counter-claim or set off of NRL (hereinafter Company) against the Contractor/Vendors or of the Contractor/Vendors against company or regarding any right, liability, act, omission on account of any of the parties hereto arising out of or in relation to this agreement shall be resolved through Arbitration under Arbitration and Conciliation Act 1996 as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof.

ii. Reference to Arbitration shall be made by writing a letter to the Managing Director of the Company, with copy to the Contractor/Vendor or the company, as the case may be.

iii. On receipt of such letter referring the dispute to Arbitration, Managing Director or any other officer of the Company delegated by Managing Director shall, within 30 days from the receipt of the said letter, suggest to the parties the names of three persons, who are not disqualified to act as such Arbitrator under the Arbitration and Conciliation Act 1996, as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof for selection of one of them for appointment as a sole Arbitrator, to adjudicate the dispute(s) between the parties.

iv. If while referring the dispute to Arbitration the parties mutually agree that the Arbitration will be by a Tribunal consisting of three Arbitrators, then each party will nominate one person, who is not forbidden to act as Arbitrator and the two Arbitrators so nominated will select the third and Presiding Arbitrator to adjudicate the dispute.

v. Subject to the provisions of the Arbitration and Conciliation Act, 1996, as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof, the Award of the Arbitrator or the Arbitrators, as the case may be, shall be final, conclusive and binding on both parties to the Agreement.

vi. The party(ies) against whom the Arbitration proceedings have been initiated, that is to say, the Respondents in the proceedings, shall be entitled to prefer a Cross-Claim, Counter- Claim or set off before the Arbitrator(s) in respect of any matter or issue arising out of or in relation to the Agreement without seeking a formal reference to Arbitration for such Counter-Claim, Cross Claim or set off and the Arbitrator(s) shall be entitled to consider and deal with the same as if the matters arising there from has/have been referred to him/them originally and deemed to form part of the reference made to Arbitration.

vii. Place of arbitration, unless otherwise mutually agreed by the parties, will be Numaligarh Or Guwahati.

viii. The parties hereby agree that, unless the Arbitration and Conciliation Act,1996, as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof prohibits, the courts in the city of Golaghat or Guwahati shall have jurisdiction to entertain any application or other proceedings in respect of anything arising under this agreement and any award or awards made by the Sole Arbitrator(s) / Arbitral tribunal shall be filed in the concerned courts in the District Court of Golaghat or Kamrup Metro .

		ix. Notwithstanding anything contained in the contract between the parties, the aforementioned clause nos. (i) to (viii) shall be applicable only in case where the value of dispute between the parties, including the claim, counter claim, or set off is less than Rs. 10 Crores, for contracts of domestic procurements. x. In case of a value of the dispute is above Rs. 10 Crores for contracts of domestic procurements, the party shall have to approach the Managing Director, NRL for Mediation. 20.1.2 MEDIATION I. Initiation of Mediation For disputes valued above Rs. 10 Crores, the concerned party shall approach the Managing Director of NRL with their claim. Upon receiving such a request, the Managing Director shall refer the matter to a High-Level Committee (HLC) for mediation, where applicable. II. High-Level Committee (HLC) A High-Level Committee will be constituted by the MD of NRL, comprising a Chairman and two Members, following these guidelines: a. Chairman The Chairman will be selected from individuals of high integrity from the following categories:- • Retired Civil Servant not below the rank of Joint Secretary. • An officer who has served as an Independent External Monitor (IEM) at any Public Sector Undertakings (PSUs). • Retired High Court or Supreme Court Judge. b. Members Members will be individuals who had superannuated from any Central Oil PSUs not below the rank of CGM. III. Mediation Procedure Mediation shall be conducted within the territorial jurisdiction of a court or tribunal competent to decide the subject matter of the dispute in accordance with the Mediation Act 2023. Mediation under this Act must be completed within one hundred and twenty days from the date fixed for the first appearance before the mediators. IV. Post-Mediation Recourse In the event of the failure of the mediation process, the parties retain the right to pursue appropriate legal recourse. 20.2 **FOR SETTLEMENT OF DISPUTES WITH Central PSUs / Government (except a dispute or difference concerning the Railways, Income Tax, Customs and Excise Duties)** Appointment will be done as per Government guidelines / circulars, etc. prevailing at the time of reference of the disputes.
21	**Jurisdiction:**	All disputes, actions and proceedings arising out of this contract shall be under the jurisdiction of the courts in the city of Golaghat or Guwahati.

22	**Acceptance of bid & Acknowledgement of Order:**	Upon acceptance of bid, a brief LOA (or GeM contract in case of GeM tenders) will be issued to the successful agency. If applicable as per tender / LOA / GeM contract, contract performance security (CPS), has to be submitted by the successful agency within the specified/allowed timeline. Upon submission of CPS by the agency, system generated detailed purchase order will be issued for the purpose of signing of contract. No bills will be processed until the CPS deposit, if applicable, is received by NRL. Following standard clause will become part of the detailed contract: QUOTE [*Documents referred will be suitably removed / added / filled by NRL, as applicable*] "This Order ("*WO/PO/DLoA/FOA No. and date*") is issued pursuant to the Terms and Conditions mentioned in the RFQ/NIT (including, inter-alia, the General Purchase Conditions (GPC) 'and/or' the General Conditions of Contracts (GCC) including the clause for Arbitration therein; Special Purchase Conditions 'and/or' Special Conditions of Contract; Schedule of Rate (SOR); General Obligations, Specifications, Drawings, Plans, Time Schedule of Delivery/Completion); 'and/or' Terms and Conditions mutually agreed in writing thereafter 'and/or' outlined herein. Acknowledgement of this Order by [*Vendor's Name*] implies an agreement to adhere to these specified terms / documents, forming a binding contract between [*Vendor's Name*] (the Vendor/Contractor) and Numaligarh Refinery Limited (the Owner)." [Sealed / Signed & Dated by – *NRL Signatory*] [Sealed / Signed & Dated in acknowledgement by - *Vendor's Name*] UNQUOTE The vendor shall acknowledge receipt of the purchase order within 7 days of receipt. The vendor shall sign & seal (or digitally sign) the acknowledgement and return the same to NRL.
23	**Distribution of Documents:**	GST Invoices [03 sets in Original (duly seal and signed)/Digitally Signed Invoice] and other original despatch documents shall be sent to the following billing address: NRL Bill Desk Administrative Building, Numaligarh Refinery Limited Pankagrant, P.O. Numaligarh Refinery Project (NRP) District: Golaghat, Assam, India. Pin Code : 785699 E-mail: z_billdesk@nrl.co.in
24	**Conflict among other Terms and Conditions:**	In case of conflict between these General Terms & Conditions and any other special or typed conditions agreed to for a particular Purchase Order, the later shall prevail to the extent applicable.
25	**Non Assignment:**	The Purchase Order shall not be assigned by the vendor to any other party without prior written permission from NRL.
26	**Control Regulations:**	Vendor shall arrange for supply and despatch in strict conformity with the control regulations applicable and after obtaining permits, if any, under the regulations in force from time to time.
27	**Govt. Policy:**	The existing policy of the Government of India with regard to Purchase Preference to Public Sector Enterprises shall be applicable.
28	**Purchase Preference as per Govt. Policies:**	NRL reserves the right to provide purchase preference to bidders as per MSE/ PP-LC/Any other Govt. policy in place.

29(A)	**Contract Performance Security (CPS):**	To ensure due performance of the contract, contract performance security is to be deposited by the successful bidder awarded the contract [*CPS is also referred to as PBG or ePBG in GeM*]. The rate of Contract Performance Security shall be as follows, unless otherwise specified in the NIT/RFQ:

Type of Contract	**Rate of CPS**
Procurement of materials up to an individual contract value of Rs. 10 Lakhs.	Nil
Procurement of Spares and materials of proprietary nature from original manufacturer / the sole selling agent of OEM / authorized dealer of OEM/Proprietary vendor. Supplies by Govt. Agencies or Institutions (Other than PSUs), Departments/Agencies/Autonomous Bodies under control of State/Central Government.	Nil
Procurement of materials including nomination, LSTK contract above an individual contract value of Rs.10 Lakhs.	3% of contract value
Materials for Plant Emergency / Emergency (Emergency to be declared by NRL).	Nil
Nomination supplies by PSUs.	Nil
Procurement of materials through ARC (Annual Rate Contract). [Annualized estimated contract value shall be considered in absence of a defined contract value. In case the contract period is 1 year or less the performance security shall be 3% of contract value].	3% of annualized / estimated contract value
Procurement of materials with Staggered delivery.	3% of contract value

Note:-

1) For the purpose of determining the applicability and amount of Contract Performance Security, the contract / order value including delivery charges like packing, freight, insurance, TPI etc. and value of associated services like installation, commissioning, AMC etc. shall be considered unless otherwise specified in the RFQ/NIT. However, the order value excluding taxes and duties shall be considered for determining the amount of security/BG. For GeM contracts, applicability limits or value as ascertained by GeM policy shall be applicable.

2) Annualized contract value shall be total contract value [as defined in (1) above] divided by the number of years [provisional extension period, if any, and corresponding value, shall be excluded].

Contract Performance Security is to be furnished within 10 days from the date of notification of the award (LOA) and it should remain valid for a period of 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any). The CPS may be deposited through online payment in an acceptable form to designated account of NRL or in the form of BG as per prescribed format for CPS [*refer clause 40 below for further details*].

The earnest money deposit (EMD), wherever applicable, of the contractor whose tender may be accepted, if paid in forms other than Bank Guarantee, can be converted to and adjusted with contract performance security for due performance of the contract, if the contractor so desires. In such case, the shortfall amount towards CPS (if any) may be deposited through online payment in an acceptable form to designated account of NRL or in the form of BG as per prescribed format of NRL (or GeM) for CPS.

Detailed contract shall be signed and entered into after receipt and verification of the requisite CPS, if applicable.

If the bidder, whose bid has been found to be the lowest evaluated bid withdraws or whose bid has been accepted fails to honour the procurement contract as may be required, or fails to provide the contract performance security within the time provided by NRL or otherwise withdraws from the procurement process or is found

		to have neglected / abandoned the order / LOA, the award may be terminated, the agency may be debarred as per holiday listing policy of NRL and his EMD/Bid security may be forfeited and other penal actions for breach of contract may be initiated, after serving a show cause notice. The performance security will be forfeited and credited to the procuring entity's account in the event of a breach of contract by the contractor. It would be refunded to the contractor without interest, after he duly performs and completes all obligations under the contract including the warranty period. Proforma of Bank Guarantee for Contract Performance Security is available in www.nrl.co.in (Tenders -> Download Manuals section).
29	**Warranty Bank Guarantee (WBG):**	In case of **capital equipment goods**, supplied materials shall be guaranteed against manufacturing defects arising from design, material, workmanship or any omission on part of the vendor/contractor for a period of 12 months from the date of commissioning or 18 months from the date of last dispatch whichever is earlier, unless otherwise specified in the RFQ/NIT. For materials other than capital equipment goods, Guarantee/Warranty of the supplied goods shall be provided by the supplier/contractor where a condition for Guarantee/Warranty is specifically provided in the RFQ/NIT. The period of Guarantee/Warranty shall be as per clause 10 above or as mentioned in the Guarantee/Warranty clause of the RFQ/NIT. In such cases, as specified above, a Warranty Bank Guarantee (in addition to CPS) is required to be submitted in the prescribed format, in the currency of the contract, valid for 03 (three) months beyond the Guarantee/Warranty period. The rate of Warranty Bank Guarantee shall be as follows, unless otherwise specified in the NIT/RFQ:

Type of Contract	**Amount of Warranty Bank Guarantee**
Procurement of materials up to an individual contract value of Rs. 10 Lakhs.	Nil
Procurement of Spares and materials of proprietary nature from original manufacturer / the sole selling agent of OEM / authorized dealer of OEM/Proprietary vendor. Supplies by Govt. Agencies or Institutions (Other than PSUs), Departments/Agencies/Autonomous Bodies under control of State/Central Government.	Nil
Procurement of materials including nomination, LSTK contract above an individual contract value of Rs.10 Lakhs.	**7%** of contract value
Materials for Plant Emergency / Emergency	**7%** of contract value
Nomination supplies by PSUs.	**7%** of contract value
Procurement of materials through ARC (Annual Rate Contract). [Annualized estimated contract value shall be considered in absence of a defined contract value. In case the contract period is 1 year or less the performance security shall be 7% of contract value].	**7%** of annualized / estimated contract value
Procurement of materials with Staggered delivery.	**7%** of contract value / individual lot ordered, at the discretion of supplier

Note:-

1) For the purpose of determining the applicability and amount of Warranty Bank Guarantee, the contract / order value including delivery charges like packing, freight, insurance, TPI etc. and value of associated services like installation, commissioning, AMC etc. shall be considered unless otherwise specified in the RFQ/NIT. However, the order value excluding taxes and duties shall be considered for determining the amount of security/BG. For GeM contracts, value as ascertained by GeM policy shall be applicable.

		2) Annualized contract value shall be total contract value [as defined in (1) above] divided by the number of years [provisional extension period, if any, and corresponding value, shall be excluded]. Vendor shall submit the Warranty Bank Guarantee for amount of Seven percent (7%) of the contract value as with an unconditional BG, as per prescribed format of NRL, [*refer clause 40 below for further details*] "OR" In cases, where WBG is applicable, it is normally permissible to allow Contract Performance Security to be valid upto 90 (ninety) days beyond delivery/ commissioning period; and the vendor may submit a fresh Warranty Bank Guarantee of 10 (ten) per cent of the value of the goods in the currency of the contract valid upto 90 (ninety) days beyond the Guarantee/Warranty period. In such cases, the performance guarantee will be returned only after satisfactory delivery/commissioning and receipt of the warranty bank guarantee. Further, contractor may at his option submit a Contract Performance Security covering also the WBG value (where WBG is applicable), valid for a period of 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any) – in which case, he will not be required to submit a BG for Warranty. In case, WBG is not provided by the vendor, equivalent amount shall be kept on hold from his first payment [or subsequent payment(s), if insufficient from first payment] in lieu of Warranty Bank Guarantee. All compensation or other sums of money payable by the contractor to the owner under terms of the contract may be deducted from or paid by the encashment of a sufficient part of his WBG (and CPS) or from any sums which may be due or may become due to the contractor by the owner. No interest shall be payable by the owner for the sum deposited as CPS or WBG. The CPS and/or WBG amounts will be refunded to the contractor without interest, after he duly performs and completes all obligations under the contract including the warranty period. Proforma of Bank Guarantee for Indigenous Purchase (Warranty/Guarantee) is available at www.nrl.co.in in Tender Room section.
30	**Spare Parts:**	The vendor must furnish itemized and price list of spare parts required for two year's operation of equipment wherever applicable. The vendor shall provide the necessary cross sectional drawings to identify the spare parts numbers and their location as well as in interchangeability chart, wherever applicable.
31	**Force Majeure:**	A Force Majeure (FM) means extraordinary events or circumstance beyond human control such as an event described as:- (i) An act of God: A natural calamity like flood, storm, drought, lightning, tidal wave, tsunami, cyclone other natural disaster; earthquakes, epidemics, plague, quarantine restrictions. (ii) Or events such as a war, strike, riots, rebellion or sabotage, terrorism or acts of public enemy (including the acts of any independent unit or individual engaged in activities in furtherance of a programme of irregular warfare), acts of belligerence of foreign enemies (whether declared or undeclared), blockades, revolution, or insurrection, exercise of military or usurped power, or any attempt at usurpation of power; lockouts, crimes, hostility, civil commotion. (iii) Unforeseen incidents such as fires, explosions, accidents, loss or breakage of major equipment or facilities, structural collapse, radioactive contamination or ionizing radiation; air crash, shipwreck, or train wreck. (iv) Or events like expropriation of facilities by Government authorities, compliance with any order or request of any Governmental authorities, and freight embargoes

		FM does not include negligence or wrong-doing, predictable/seasonal rain and any other events specifically excluded in the clause. A FM clause in the contract frees both parties from contractual liability or obligation when prevented by such events from fulfilling their obligations under the contract. An FM clause does not excuse a party's non-performance entirely, but only suspends it for the duration of the FM. The contractor has to give notice of FM within 14 days from the date of such event and it cannot be claimed ex-post facto. There may be a FM situation affecting the purchase organisation only. In such a situation, the purchase organisation is to communicate with the supplier along similar lines as above for further necessary action. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of FM for a period exceeding 90 (ninety) days, either party may at its option terminate the contract without any financial repercussion on either side. Any delays in or failure of the performance of either party hereto shall not constitute default hereunder or give rise to any claims for damages, if any, to the extent such delays or failure of performance is caused by force majeure. Upon receipt of the intimation from the contractor of the happening of a FM event, the EIC shall within 10 days therefrom, determine as to whether such event is an FM event within the meaning of the FM clause and such decision of the EIC shall be final and binding upon the parties. In case EIC is not applicable in the contract, the decision of the HOD of Commercial Dept. shall be final and binding.
32	**Sales Conditions:**	On the issue of Purchase Order after process of tender, vendor waives and considers as cancelled any of his general sales conditions.
33	**New & Unused Materials:**	All the material supplied by the vendor shall be brand new, unused and of recent manufacture.
34	**Limitation of Liability:**	The aggregate liability of the Vendor to NRL under the Contract shall be total Contract Price/total Contract Value, except that this Clause shall not limit the liability of the Contract for following; i. Any liability pursuant to vendor's breach of any Applicable Law; or ii. Any loss resulting from fraud, intentional or willful misconduct or illegal or unlawful acts or gross negligence or omissions of vendor or its affiliates or any sub-vendor or any supplier or any of its or their respective officers, directors, employees, servants or agents or any other person acting on behalf of the Vendor; or iii. Any liability to rectify, repair, restore or replace any materials and / or works or deficiencies therein in terms of the Contract; or iv. In the event of any claim or loss or damage arising out of infringement of Intellectual Property. Neither party shall be liable to the other party for any kind of indirect or consequential loss or damage including loss of use, loss of profit, loss of production or business interruption which is connected with any claim arising under the contract.
35	**Compliance of Regulations:**	Vendor warrants that all goods/Materials covered by this order have been produced, sold, dispatched, delivered and furnished in strict compliance with all applicable laws, regulations, labour agreement, working condition and technical codes and statutory requirements as applicable from time to time. The vendor shall ensure compliance with the above and shall indemnify owner against any actions, damages, costs and expenses of any failure to comply as aforesaid.

35 (A)	**Governing Law:**	Regardless of the place of contracting, place of performance or otherwise, this Agreement, and all amendments, modifications, alterations, or supplements, thereto shall be governed by the laws of India and respective state laws for the nature, validity and interpretation thereof.
36	**Integrity Pact:**	Vendors are requested to sign & return our pre-signed IP document, if applicable. This document is essential & binding. Vendor's failure to return the IP document duly signed along with Bid Document may result in the bid not being considered for further evaluation.
36(A)	**Conflict of Interest among Bidders/ Agents:**	A bidder shall not have conflict of interest with other bidders. The bidders found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if: a) they have controlling partner(s) in common; or b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or c) they have the same legal representative/agent for purposes of this bid; or d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid. f) In cases of agents quoting in offshore procurements (GTE), on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following: 1. The principal manufacturer directly or through one Indian agent on his behalf; and [in case of receipt of bids from both the Indian agent & the principal, the **principal manufacturer** shall be approached to arrange for withdrawal of one of the bids; in case of non-withdrawal, the bid from the **principal manufacturer** shall be considered] 2. Indian/foreign agent on behalf of only one principal. g) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business. i) However, restrictions under (a), (b), (c), (d) shall not be applicable against licensor recommended agents / suppliers and central/state PSUs. j) Self-declaration from participating bidders w.r.t. not having any conflict of interest with other participating bidders shall be submitted with bids. In case any conflict of interest is found to have occurred, such bidders shall be informed to keep any one bid and withdraw the rest of the bids; In case of non-withdrawal, NRL shall disqualify all such bids with conflict of interest.
37	**Competitive Agreements/ Abuse of Dominant Position:**	The Competition Act, 2002 as amended by the Competition Amendment) Act 2007 (the Act), prohibits anti-competitive practices and aims at fostering competition and at protecting Indian markets against anti- competitive practices by enterprises. The Act prohibits anti-competitive agreements, abuse of dominant position by enterprises, and regulates combinations (consisting of acquisition, acquiring of control and M&A) wherever such agreements, abuse or combination causes, or is likely to cause, appreciable adverse effect on competition in markets in India. NRL reserves the right to approach the Competition Commission established under

		the Act of Parliament and file information relating to anti-competitive agreements and abuse of dominant position. If such a situation arises, then Vendors are bound by the decision of the Competitive Commission and also subject to penalty and other provisions of the Competition Act.
38	**Policy on Holiday Listing:**	NRL's policy for holiday listing/ banning/ debarring of contractors/ suppliers, as prevailing on the date of issue of the show-cause notice, shall be applicable. For updated holiday listing policy, the NRL website www.nrl.co.in shall be referred.
39	**Right of Bidder to Question Rejection at Techno-Commercial Stage:**	The tenderer is to be permitted to send his representation in writing in case he feels that a proper procurement process is not being followed and/or his techno-commercial bid has been rejected wrongly. In case of techno-commercial rejection, such representation must be submitted within 48 hours from notification. Representation in case of GeM tenders must be submitted through the facility provided in GeM portal. **Bidder's right to question rejection of his bid:-** Only a directly affected bidder can represent in this regard:- i) Only a bidder who has participated in the concerned procurement process (i.e., pre-qualification and bidding) can make such representation; ii) In case pre-qualification bid has been evaluated before the bidding of technical/ financial bids (in 2 stage bidding process), an application for review in relation to the technical/ financial bid may be filed only by a bidder who has qualified in pre-qualification bid (1st stage); iii) In case techno-commercial bid has been evaluated before the opening of the financial bid, an application for review in relation to the financial bid may be filed only by a bidder whose technical bid is found to be acceptable. iv) However, following shall not be subject to review: a) Determination of the need for procurement; b) Selection of the mode of procurement or bidding system; c) Choice of selection procedure; d) Provisions limiting participation of bidders in the procurement process; e) The decision to enter into negotiations with the L1 bidder; f) Cancellation of the procurement process except where it is intended to subsequently re-tender the same requirements; g) Issues related to ambiguity in contract terms may not be taken up after a contract has been signed, all such issues should be highlighted before consummation of the contract by the vendor/contractor; and h) Complaints against specifications, except under the premise that they are either vague or too specific so as to limit competition.
39(A)	**Confidentiality of Bid Evaluation Process:**	Information relating to the examination, clarification, evaluation and comparison of bids, and recommendations for the award of a contract, shall not be disclosed to bidders or any other person not officially concerned with such a process until the award to the successful bidder has been announced. From the time of bid opening to the time of contract award, no bidder shall contact the Procuring Entity on any matter related to the bid, except on request and prior written permission. Any effort by the bidder to influence the Procuring Entity in bid evaluation, bid comparison or contract award decisions will vitiate the process and will result in the rejection of the bidder's bid.
40	**Submission of CPS/WBG:**	**(a) Mode of submission of CPS / WBG:** Performance security / WBG may be furnished in the form of bank guarantee (including e-Bank Guarantee) issued/confirmed from any of the commercial bank in India in the prescribed format of NRL or through online payment in an acceptable form to designated account of NRL (receipt/acknowledgement of the online transaction to be immediately submitted by bidder to NRL). The performance security shall be denominated in the currency of the contract. In case of GTE tenders, the performance security should be in the same currency as the contract

		and must conform to Uniform Rules for Demand Guarantees (URDG 758) – an international convention regulating international securities. The Bank Guarantee shall be issued from: a) Any schedule Indian Bank or Any Branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in case of domestic bidder, or b) In case of foreign bidder, the bank guarantee can be accepted from any scheduled bank in India or from International bank who has its branch in India registered with Reserve Bank of India, or c) Any foreign Bank which is not a Scheduled Bank in India, provided the Bank Guarantee issued by such Bank is counter-guaranteed by any Branch situated in India of any Scheduled Bank incorporated in India. d) Bank Guarantee issued by a Bank, amongst others, must contain the following particulars of such bank: ▪ Full address. ▪ Branch Code. ▪ Code Nos. of the authorized signatory with full name and designation. ▪ Phone Nos., Fax Nos., E-mail address. e) The domestic bidders will have to submit the Bank Guarantee from any of the scheduled banks and on non-judicial stamp paper of requisite value as per the Indian Stamp Act, purchased in the name of the issuing banker. f) The Bank Guarantee issued by the Bank must be routed through SFMS platform as per details provided in the format for BG. g) The foreign bidder will submit the Bank Guarantee from Banks of Indian origin situated in their country. In case no such bank of Indian origin is situated in their country, the Bank Guarantee may be submitted from the bankers as specified above. h) In case of GTE tenders, the performance security / warranty bank guarantee should be in the same currency as the contract and must conform to Uniform Rules. **Note**: *In case of GeM tenders the BG format, applicability limits and calculation for performance security as per GeM shall also be accepted.* **(b) Examination / verification of BGs:** All bank guarantees received against a contract/order, shall be verified by NRL for the submitted format, order no., amount of the bank guarantee and name of the party on whose behalf it has been issued along with whether the following, as applicable:- (i) The BG contains the name, designation and code number of the Bank officer(s) signing the guarantee(s). (ii) The address and other details (including telephone no.) of the controlling officer of the bank are obtained from the branch of the bank issuing the BG (this should be included in all BGs). In order to know the authenticity of the bank guarantee submitted by the bidder, NRL shall obtain Structured Financial Messaging Solutions (SFMS) confirmation (or written confirmation through letter for non-SFMS) from the designated bank of the Company.

41	**Other Information w.r.t. Bank Guarantees:**	(a) e-Bank Guarantees are accepted by NRL. Detailed modality for submission of e-BGs shall be provided in the RFQ or respective proforma for BG or provided by NRL on request. (b) For the following BGs, wherever applicable, the value of the BG shall be calculated as provided under:- **(i) BG against Milestone Payment / RA Bill**: The value of the BG, if applicable, shall be equal to the amount of milestone payment(s), excluding any taxes and duties which are paid extra by NRL. GST component shall be paid based on GSTR2B updation by seller. [*Unless otherwise specified in the RFQ*.] **(ii) BG against Advance Payment / Mobilization Advance**: The value of the BG, where applicable, shall be equal to 110% of the advance amount(s) including any GST/Taxes to be paid extra by NRL. [*Advance Payment / Mobilization Advance is interest bearing and is not accepted by NRL, unless otherwise specifically provided for in the RFQ*.]

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PREAMBLE TO PRICE SCHEDULE (INDIAN BIDDER)	
RFQ NO. SS/C050-1P39A-YR-MR-1360/42	
ITEM: PRESSURE RELIEF VALVES	
Name of Bidder : M/s _____	
1	Scope of supply including testing, inspection, documentation etc., shall be strictly as per Material Requisition and other documents which are part of RFQ Document.
2	Bidder's quoted prices are for complete scope as per MR and are inclusive of drawing and documentation charges for all supplies and services as per MR.
3	Bidders shall quote Freight charges considering Road Transportation up to Project Site as per the RFQ document.
4	In case bidder is supplying goods from SEZ or from any such special zones, bidder shall include all taxes and duties (viz. Basic Custom Duty (BCD), Social Welfare Surcharge (SWS) etc.) except IGST under Supply Price in BoQ. In addition bidder to furnish the details of customs duty and social welfare surcharge included in qouted price under Form A2.
5	Bidder to note that evaluation shall be done on ITEM WISE basis. The order shall be awarded on ITEM WISE basis to the qualified and techno-commercially acceptable bidder who is lowest (L-1) in price for respective ITEM. The bidders can quote for multiple ITEMS. ITEMS shall be awarded to the Bidder(s) who is(are) qualified for the respective ITEM(s) and also Lowest (L1) in prices for the respective ITEM(s). Following shall be considered for the purpose of ITEM WISE basis Price Evaluation, as per provisions of RFQ document. - Supply Price - Freight Charges till Project Site
6	Bidder to note that Technical loading, if any, shall be as per loading criteria if specified in the MR and the same shall be considered for evaluation. Hence, bidder shall quote accordingly.
7	Bidder shall quote prices for spares for 2 years operation and maintenance separately in the attached **FORM-C** to Price Schedule as per material requisition(MR).These spares shall be ordered by Owner / Purchaser separately. The price of these spares shall not be considered for commercial evaluation purpose.
8	Bidder to mandatorily submit signed and stamped copy of Pre filled unit rate of Addition/Deletion attached as **FORM-D** to Price Schedule
9	Quoted prices are firm and fixed till complete execution of the entire order and no variation on any account is allowed, unless otherwise categorically specified in RFQ documents.
10	In case of any discrepancy in the item description, quantity, etc. in the price schedule format vis-a vis the details provided in MR, the MR details shall prevail.
11	Bidder confirms that he has noted the contents of the Preamble to the Price Schedule, RFQ, Material Requisition, etc. and quoted his prices accordingly without any deviation.
12	Bidder to clearly indicate **'Quoted' / 'Not Quoted'** against each item in the price column in the unpriced Price Schedule. Bidders to submit Price in the Price Schedule in their Priced Bid and Unpriced Part indicating **'Quoted' / 'Not Quoted'** in the Unpriced Bid.
13	Bidders to upload the Un-priced and Priced part of their bids strictly in the Un-priced & Priced folders respectively in the e-tender (CPPP/NIC) portal.
14	Prices shall be quoted strictly as per the price schedule format/BoQ made available herein without altering any of the contents of the "price schedule" format as well as without deleting / altering / formatting the content of other sheet of this excel sheet.
	Notes 1. Bidders are mandatorily required to enter their name in the each page of excel file of Price Schedule/BoQ provided in the e-tender portal for submission of price bid. 2. Bidder to upload excel file of the priced copy of price schedule format/BoQ. BIDDER'S SIGNATURE WITH STAMP/SEAL

Validate Print Help

Tender Inviting Authority: EIL on behalf of NRL

Name of ITEM : PRESSURE RELIEF VALVES

RFQ No: SS/C050-1P39A-YR-MR-1360/42

Name of the Bidder/ Bidding Firm / Company :	

PRICE SCHEDULE

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

Sl. No.	Item Description	Quantity	Units	Total Amount (Inclusive of all Taxes & Duties except GST) (in INR)	Lumpsum Transportation charges from vendor's work/shop to Project site (Including all taxes and duties excluding GST) (in INR)
	Supply of Following Items on FOT Dispatch Point Basis (Including all taxes and Duties excluding GST) as per complete scope of MR.				
1	MR S.No 1.0001 , Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
2	MR S.No 1.0002 , Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED)	1	No.		
3	MR S.No 1.0003 , Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED)	1	No.		
4	MR S.No 1.0004 , Pressure Relief Valve :- Conventional ,Inlet 1.5" - 600#,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
5	MR S.No 1.0005 , Pressure Relief Valve :- Conventional ,Inlet 1.5" - 600#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
6	MR S.No 1.0006 , Pressure Relief Valve :- Conventional ,Inlet 1.5" - 600#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
7	MR S.No 1.0007 , Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
8	MR S.No 1.0008 , Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
9	MR S.No 1.0009 , Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
10	MR S.No 1.0010 , Pressure Relief Valve :- Bellow ,Inlet 3" - 300#,Outlet 4" - 150# ,Body ASTM A 351 GR.CF8, Bellows: SS316L	1	No.		
11	MR S.No 1.0011 , Pressure Relief Valve :- Conventional ,Inlet 1" - 300#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED)	1	No.		
12	MR S.No 1.0012 , Pressure Relief Valve :- Conventional ,Inlet 1" - 300#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED)	1	No.		
13	MR S.No 1.0013 , Pressure Relief Valve :- Bellow ,Inlet 1" - 150#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED), Bellows: SS316L	1	No.		
14	MR S.No 1.0014 , Pressure Relief Valve :- Bellow ,Inlet 1" - 150#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED), Bellows: SS316L	1	No.		

15	MR S.No 1.0015 , Pressure Relief Valve :- Bellow ,Inlet 1" - 150#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED), Bellows: SS316L	1	No.		
16	MR S.No 1.0016 , Pressure Relief Valve :- Bellow ,Inlet 3" - 150#,Outlet 4" - 150# ,Body ASTM A 216 Gr. WCB , Bellows: SS316L	1	No.		
17	MR S.No 1.0017 , Pressure Relief Valve :- Bellow ,Inlet 3" - 150#,Outlet 4" - 150# ,Body ASTM A 216 Gr. WCB , Bellows: SS316L	1	No.		
18	MR S.No 1.0018 , Pressure Relief Valve :- Conventional ,Inlet 1.5" - 600#,Outlet 3" - 600# ,Body ASTM A 182 GR.F304	1	No.		
19	MR S.No 1.0019 , Pressure Relief Valve :- Bellow ,Inlet 1.5" - 600#,Outlet 3" - 600# ,Body ASTM A 182 GR.F304 ,Bellows SS316L	1	No.		
20	MR S.No 1.0020 , Pressure Relief Valve :- Bellow ,Inlet 1" - 150#,Outlet 2" - 150# ,Body ASTM A 182 GR.F304 , Bellows: SS316L	1	No.		
21	MR S.No 1.0021 , Pressure Relief Valve :- Bellow ,Inlet 1.5" - 300#,Outlet 3" - 150# ,Body ASTM A 182 GR.F316 ,Bellows SS316L	1	No.		
22	MR S.No 1.0022 , Pressure Relief Valve :- Bellow ,Inlet 2" - 300#,Outlet 3" - 150# ,Body ASTM A 351 GR.CF8M / ASTM A 182 GR.F316 ,Bellows SS316L	1	No.		
23	MR S.No 1.0023 , Pressure Relief Valve :- Bellow ,Inlet 2" - 300#,Outlet 3" - 150# ,Body ASTM A 351 GR.CF8M / ASTM A 182 GR.F316 ,Bellows SS316L	1	No.		
24	MR S.No 1.0024 , Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GRLCB	1	No.		
25	MR S.No 1.0025 , Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GRLCB	1	No.		
26	MR S.No 1.0026 , Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A 182 GR.F304	1	No.		
27	MR S.No 1.0027 , Pressure Relief Valve :- Conventional ,Inlet 2" - 600#,Outlet 3" - 150# ,Body ASTM A 351 GR.CF8	1	No.		
28	MR S.No 1.0028 , Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1	No.		
29	MR S.No 1.0029 , Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1	No.		
30	MR S.No 1.0030 , Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1	No.		
31	MR S.No 1.0031 , Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1	No.		
32	MR S.No 1.0032 , Pressure Relief Valve :- Bellow ,Inlet 4" - 150#,Outlet 6" - 150# ,Body ASTM A 216 Gr. WCB ,Bellows SS316L	1	No.		
33	MR S.No 1.0033 , Pressure Relief Valve :- Bellow ,Inlet 4" - 150#,Outlet 6" - 150# ,Body ASTM A 216 Gr. WCB ,Bellows SS316L	1	No.		
34	MR S.No 1.0034 , Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A105 (NORMALIZED) ,Bellows SS316L	1	No.		
35	MR S.No 1.0035 , Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A105 (NORMALIZED) ,Bellows SS316L	1	No.		
36	MR S.No 1.0036 , Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1	No.		
37	MR S.No 1.0037 , Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1	No.		
38	MR S.No 1.0038 , Pressure Relief Valve :- Conventional ,Inlet 1" - 150#,Outlet 2" - 150# ,Body ASTM A 105(NORMALIZED)	1	No.		
39	MR S.No 1.0039 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
40	MR S.No 1.0040 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		

41	MR S.No 1.0041 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105 (NORMALIZED)	1	No.		
42	MR S.No 1.0042 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
43	MR S.No 1.0043 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
44	MR S.No 1.0044 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105 (NORMALIZED)	1	No.		
45	MR S.No 1.0045 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
46	MR S.No 1.0046 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
47	MR S.No 1.0047 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
48	MR S.No 1.0048 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
49	MR S.No 1.0049 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
50	MR S.No 1.0050 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
51	MR S.No 1.0051 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
52	MR S.No 1.0052 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
53	MR S.No 1.0053 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
54	MR S.No 1.0054 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
55	MR S.No 1.0055 , Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1	No.		
56	MR S.No 1.0056 , Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1	No.		
57	MR S.No 1.0057 , Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1	No.		
58	MR S.No 1.0058 , Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1	No.		
59	MR S.No 1.0059 , Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1	No.		
60	MR S.No 1.0060 , Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1	No.		
61	MR S.No 1.0061 , Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1	No.		
62	MR S.No 1.0062 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
63	MR S.No 1.0063 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
64	MR S.No 1.0064 , Thermal Relief Valve :- Conventional ,Inlet 1" - 300# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
65	MR S.No 1.0065 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
66	MR S.No 1.0066 , Thermal Relief Valve :- Conventional ,Inlet 1" - 300# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		

67	MR S.No 1.0067 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
68	MR S.No 1.0068 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
69	MR S.No 1.0069 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
70	MR S.No 1.0070 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
71	MR S.No 1.0071 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
72	MR S.No 1.0072 , Thermal Relief Valve :- Conventional ,Inlet 1" - 300# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
73	MR S.No 1.0073 , Thermal Relief Valve :- Conventional ,Inlet 1" - 300# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
74	MR S.No 1.0074 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		
75	MR S.No 1.0075 , Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1	No.		

FORM-C

PRICE SCHEDULE FORMAT FOR 2 YEARS OPERATION & MAINTENANCE SPARES (FOR INDIAN BIDDER)

RFQ NO. SS/C050-1P39A-YR-MR-1360/42

ITEM: PRESSURE RELIEF VALVES

NAME OF BIDDER : M/S

S. NO.	Item Tag No. / Code	Description of spare parts	Qty	Unit	Unit Price on FOT Despatch Point including P&F excluding GST (INR)	Total Price on FOT Despatch Point including P&F excluding GST (INR)	Freight (in %) excluding GST
1	2	3	4	5	6	7	8

NOTES:

A.) 'FOR 2 YEAR O&M SPARES, PRICES SHALL BE KEPT VALID FOR A PERIOD OF TWO YEARS FROM THE DATE OF SUPPLY OF MAIN ITEMS/EQUIPMENT.

B.) QUOTATION FOR TWO YEARS OPERATION AND MAINTENANCE SPARES, OVER AND ABOVE MANDATORY SPARES AS PER INSTRUCTIONS TO BIDDERS ENCLOSED WITH BIDDING DOCUMENT.

FORM A2

ENCLOSURE TO PRICE SCHEDULE FOR SUPPLY (INDIAN BIDDERS)

RFQ NO: SS/C050-1P39A-YR-MR-1360/42

ITEM: PRESSURE RELIEF VALVES

Name of Bidder : M/s _____

DETAILS OF BUILT-IN-CIF VALUE OF IMPORT CONTENT, ITEM DETAILS OF IMPORT CONTENT AND RATES OF IMPORT DUTY CONSIDERED AND INCLUDED IN QUOTED FOT DESPATCH POINT PRICES QUOTED IN BOQ

DESCRIPTION			CIF value of Import Content included in quoted supply prices (In Rs)	RATE OF CUSTOM DUTY INCLUDED IN QUOTED SUPPLY PRICES		
For Item Sl . No. as per Price Schedule	Description of Imported Items	Qty. (Unit____) *(1)		CUSTOM TARRIF HSN CODE	BASIC CUSTOMS DUTY (%) (RATE)	SOCIAL WELFARE SURCHARGE (%)
1	2	3	4	5	6	7

DETAILS OF ITEMS SUPPLIED FROM SPECIAL ECONOMIC ZONE(SEZ) AND RATES OF IMPORT DUTY CONSIDERED AND INCLUDED IN QUOTED FOT DESPATCH POINT PRICES QUOTED IN BOQ (To be filled only if bidder's works is registered under SEZ)

DESCRIPTION			CIF value of Import Content included in quoted supply prices (In Rs)	RATE OF CUSTOM DUTY INCLUDED IN QUOTED SUPPLY PRICES		
For Item Sl . No. as per Price Schedule	Description of Items	Qty. (Unit____) *(1)		CUSTOM TARRIF HSN CODE	BASIC CUSTOMS DUTY (%) (RATE)	SOCIAL WELFARE SURCHARGE (%)
1	2	3	4	5	6	7
	TOTAL CIF VALUE:					

NOTES

1	*** Unit to be specified by the Bidder.**
2	Bidder to furnish the above details separately for each item Sl. No of MR qouted above as per relevan provisison of RFQ document
3	Insurance of Built-in Imported Materials (imported raw materials/items) shall be Bidder/Supplier's scope
4	Bidder may insert rows, if necessary.

MATERIAL REQUISITION (TOP SHEET)

ITEM DESCRIPTION :	**PRESSURE RELIEF VALVES**		
ITEM CODE :	**15EC**	**DESTINATION:**	**NRL, ASSAM**
ITEM CATEGORY :	**II**	**DELIVERY PERIOD:**	**AS PER COMMERCIAL DOCUMENT**

REQUISITION NUMBER

(Always quote this Number given below as reference)

C050-1P39A-YR-MR-1360	A
JOB NO. — UNIT/ AREA — MAIN COST — DOC. CODE — SR. NO.	REV

19-Feb-2026	16	51
DATE	DIVN.	DEPT.
	ORIGINATOR	

NOTES:

1. This page is a record of all the Revisions of this Requisition.
2. The nature of the Revision is briefly stated in the "Details" column below, the Requisition in its entirety shall be considered for contractual purposes.
3. Vendor shall note the Requisition category and shall submit his offer in line with the requirements included in attached 'Instructions to Bidders'.

REV	DATE	PREPARED BY	CHECKED BY	APPROVED BY	DETAILS
A	19-Feb-2026	PRATYUSH KUMAR SAHOO	SACHIN KUMAR GARG	NARENDRA KAKKAR	Issued For Bids

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S.No.	TAG NO./ ITEM CODE	DESCRIPTION	QUANTITY	GROUP
1		**Design, engineering, manufacture, procurement of materials and bought out components, assembly at shop, inspection, testing at manufacturer's works, packing, delivery, documentation and supply of mandatory spares as per the enclosed EIL standard specifications, special instructions to vendors, job specification, data sheets etc**		
1.0001	1P39A-PSV-113101	Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0002	1P39A-PSV-115601	Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED)	1 Nos	
1.0003	1P39A-PSV-115701	Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED)	1 Nos	
1.0004	1P39A-PSV-117101	Pressure Relief Valve :- Conventional ,Inlet 1.5" - 600#,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0005	1P39A-PSV-1172A01	Pressure Relief Valve :- Conventional ,Inlet 1.5" - 600#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0006	1P39A-PSV-1172B01	Pressure Relief Valve :- Conventional ,Inlet 1.5" - 600#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0007	1P39A-PSV-1173A01	Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0008	1P39A-PSV-1173B01	Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0009	1P39A-PSV-117401	Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0010	1P39A-PSV-133101	Pressure Relief Valve :- Bellow ,Inlet 3" - 300#,Outlet 4" - 150# ,Body ASTM A 351 GR.CF8, Bellows: SS316L	1 Nos	
1.0011	1P39A-PSV-160002A	Pressure Relief Valve :- Conventional ,Inlet 1" - 300#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED)	1 Nos	
1.0012	1P39A-PSV-160002B	Pressure Relief Valve :- Conventional ,Inlet 1" - 300#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED)	1 Nos	
1.0013	1P39A-PSV-163201	Pressure Relief Valve :- Bellow ,Inlet 1" - 150#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED), Bellows: SS316L	1 Nos	
1.0014	1P39A-PSV-165701	Pressure Relief Valve :- Bellow ,Inlet 1" - 150#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED), Bellows: SS316L	1 Nos	
1.0015	1P39A-PSV-165902	Pressure Relief Valve :- Bellow ,Inlet 1" - 150#,Outlet 2" - 150# ,Body ASTM A105 (NORMALIZED), Bellows: SS316L	1 Nos	
1.0016	1P39A-PSV-168101A	Pressure Relief Valve :- Bellow ,Inlet 3" - 150#,Outlet 4" - 150# ,Body ASTM A 216 Gr. WCB , Bellows: SS316L	1 Nos	
1.0017	1P39A-PSV-168101B	Pressure Relief Valve :- Bellow ,Inlet 3" - 150#,Outlet 4" - 150# ,Body ASTM A 216 Gr. WCB , Bellows: SS316L	1 Nos	
1.0018	1P39A-PSV-173101	Pressure Relief Valve :- Conventional ,Inlet 1.5" - 600#,Outlet 3" - 600# ,Body ASTM A 182 GR.F304	1 Nos	
1.0019	1P39A-PSV-173301	Pressure Relief Valve :- Bellow ,Inlet 1.5" - 600#,Outlet 3" - 600# ,Body ASTM A 182 GR.F304 ,Bellows SS316L	1 Nos	
1.0020	1P39A-PSV-193101	Pressure Relief Valve :- Bellow ,Inlet 1" - 150#,Outlet 2" - 150# ,Body ASTM A 182 GR.F304 , Bellows: SS316L	1 Nos	
1.0021	1P39A-PSV-303101	Pressure Relief Valve :- Bellow ,Inlet 1.5" - 300#,Outlet 3" - 150# ,Body ASTM A 182 GR.F316 ,Bellows SS316L	1 Nos	
1.0022	1P39A-PSV-3032A01	Pressure Relief Valve :- Bellow ,Inlet 2" - 300#,Outlet 3" - 150# ,Body ASTM A 351 GR.CF8M / ASTM A 182 GR.F316 ,Bellows SS316L	1 Nos	

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S.No.	TAG NO./ ITEM CODE	DESCRIPTION	QUANTITY	GROUP
1.0023	1P39A-PSV-3032B01	Pressure Relief Valve :- Bellow ,Inlet 2" - 300#,Outlet 3" - 150# ,Body ASTM A 351 GR.CF8M / ASTM A 182 GR.F316 ,Bellows SS316L	1 Nos	
1.0024	1P39A-PSV-312101A	Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GRLCB	1 Nos	
1.0025	1P39A-PSV-312101B	Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GRLCB	1 Nos	
1.0026	1P39A-PSV-313101	Pressure Relief Valve :- Conventional ,Inlet 1" - 600#,Outlet 2" - 150# ,Body ASTM A 182 GR.F304	1 Nos	
1.0027	1P39A-PSV-315602	Pressure Relief Valve :- Conventional ,Inlet 2" - 600#,Outlet 3" - 150# ,Body ASTM A 351 GR.CF8	1 Nos	
1.0028	1P39A-PSV-3433A01A	Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1 Nos	
1.0029	1P39A-PSV-3433A01B	Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1 Nos	
1.0030	1P39A-PSV-3433B01A	Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1 Nos	
1.0031	1P39A-PSV-3433B01B	Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1 Nos	
1.0032	1P39A-PSV-347301A	Pressure Relief Valve :- Bellow ,Inlet 4" - 150#,Outlet 6" - 150# ,Body ASTM A 216 Gr. WCB ,Bellows SS316L	1 Nos	
1.0033	1P39A-PSV-347301B	Pressure Relief Valve :- Bellow ,Inlet 4" - 150#,Outlet 6" - 150# ,Body ASTM A 216 Gr. WCB ,Bellows SS316L	1 Nos	
1.0034	1P39A-PSV-600001A	Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A105 (NORMALIZED) ,Bellows SS316L	1 Nos	
1.0035	1P39A-PSV-600001B	Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A105 (NORMALIZED) ,Bellows SS316L	1 Nos	
1.0036	1P39A-PSV-600002A	Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1 Nos	
1.0037	1P39A-PSV-600002B	Pressure Relief Valve :- Bellow ,Inlet 1.5" - 150#,Outlet 3" - 150# ,Body ASTM A 350 GR.LF2 CL.1 ,Bellows SS316L	1 Nos	
1.0038	1P39A-PSV-913101	Pressure Relief Valve :- Conventional ,Inlet 1" - 150#,Outlet 2" - 150# ,Body ASTM A 105(NORMALIZED)	1 Nos	
1.0039	1P39A-TSV-110001	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0040	1P39A-TSV-110002	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0041	1P39A-TSV-155701	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105 (NORMALIZED)	1 Nos	
1.0042	1P39A-TSV-165701	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0043	1P39A-TSV-165801	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0044	1P39A-TSV-315601	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105 (NORMALIZED)	1 Nos	
1.0045	1P39A-TSV-420005	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0046	1P39A-TSV-420006	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	

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S.No.	TAG NO./ ITEM CODE	DESCRIPTION	QUANTITY	GROUP
1.0047	1P39A-TSV-420007	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0048	1P39A-TSV-420008	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0049	1P39A-TSV-420009	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0050	1P39A-TSV-420010	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0051	1P39A-TSV-420013	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0052	1P39A-TSV-605602	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0053	1P39A-TSV-605701	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0054	1P39A-TSV-665601	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0055	1P39A-TSV-915601	Thermal Relief Valve :- Conventional ,Inlet 3/4" - ,Outlet 1"- ,Body ASTM A105-N (GALV.)	1 Nos	
1.0056	1S82-PSV-3131A01A	Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1 Nos	
1.0057	1S82-PSV-3131A01B	Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1 Nos	
1.0058	1S82-PSV-3131B01A	Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1 Nos	
1.0059	1S82-PSV-3131B01B	Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1 Nos	
1.0060	1S82-PSV-313201A	Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1 Nos	
1.0061	1S82-PSV-313201B	Pressure Relief Valve :- Conventional ,Inlet 4" - 300#,Outlet 6" - 150# ,Body ASTM A 352 GR.LCB	1 Nos	
1.0062	1S82-TSV-310001	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0063	1S82-TSV-310002	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0064	1S82-TSV-310003	Thermal Relief Valve :- Conventional ,Inlet 1" - 300# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0065	1S82-TSV-310004	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0066	1S82-TSV-310005	Thermal Relief Valve :- Conventional ,Inlet 1" - 300# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0067	1S82-TSV-310006	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0068	1S82-TSV-310007	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0069	1S82-TSV-310008	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0070	1S82-TSV-310009	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	

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S.No.	TAG NO./ ITEM CODE	DESCRIPTION	QUANTITY	GROUP
1.0071	1S82-TSV-310010	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0072	1S82-TSV-310011	Thermal Relief Valve :- Conventional ,Inlet 1" - 300# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0073	1S82-TSV-310012	Thermal Relief Valve :- Conventional ,Inlet 1" - 300# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0074	1S82-TSV-310014	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
1.0075	1S82-TSV-310015	Thermal Relief Valve :- Conventional ,Inlet 1" - 600# ,Outlet 2" - 150# ,Body ASTM A 350 GR.LF2 CL.1	1 Nos	
5	**Supply of two years operation and Maintenance Spares,as per enclosed instructions to vendor**			

NOTES:

Vendors shall quote prices against these items in their price schedule.
Vendor to note that the numbers given in square '[]' and curly '{}' brackets are not for their use and meant for store purpose only.
Items shall be tagged as per main equipment Tag No. only.

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LIST OF ATTACHMENTS

S.No.	DOCUMENT TITLE	DOCUMENT NO.	REV	DATE	SHEETS
1	VENDOR DATA REQUIREMENTS FOR PRESSURE RELIEF VALVE	C050-1P39A-16-51-VDR-1360	A	13-Feb-2026	3
2	Special Instruction To Vendor	C050-1P39A-16-51-SI-1360	0	19-Feb-2026	4
3	Technical Questionnaire	C050-1P39A-16-51-TQS-1360	A	19-Feb-2026	3
4	COMPLIANCE FORMAT	C050-1P39A-16-51-CF-1360	A	13-Feb-2026	1
5	DATASHEET INDEX AND DATASHEET	C050-1P39A-16-51-ID-1360	A	13-Feb-2026	152
6	Standard specification for pressure relief valves	6-52-0026	5	06-Sep-2021	10
7	Inspection and test plan for pressure relief valves	6-81-2026	4	21-May-2020	5
8	Specification for quality management system requirements from bidders	6-78-0001	3	29-Sep-2025	7
9	Specification for documentation requirements from suppliers (Including Annexures)	6-78-0003	3	29-Sep-2025	11
10	Sketch for Special Flanges	C050-1P39A-16-43-SK-4001	0	09-Jan-2026	2

NOTES:

In case of any subsequent revision of MR or PR,only revised sheets of the attachments listed above shall be issued alongwith the revision.

GENERAL NOTES:

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VENDOR DATA REQUIREMENTS
FOR
PRESSURE RELIEF VALVE

Rev. No.	Date	Purpose	Prepared by	Checked by	Approved by
A	19-FEB-2026	Issued for MR	PKS	SKG	NK

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VENDOR DATA REQUIREMENTS

The following drawings/documents marked "✔" shall be furnished by the bidder.

S. NO.	DESCRIPTION	WITH BID	POST ORDER			REMARKS
			FOR REVIEW	FOR RECORD	WITH DATA BOOK (FINAL)	
1.	Dimensional details with mounting details and model number		✔		✔	
2.	Connections by purchase(Piping,Electrical Etc.)		✔		✔	
3.	Technical Compliance Format	✔		✔		
4.	Parts list			✔	✔	
5.	Recommended spare parts list(for two years operation)	✔		✔		
6.	Installation, Operation and maintenance manual			✔	✔	
7.	Nomograph and sizing calculations	✔		✔	✔	
8.	Test certificates		✔		✔	
9.	Certificate from statutory body			✔	✔	
10.	Assembly details		✔		✔	
11.	Catalogues in english	✔		✔	✔	
12.	Filled in Datasheets	✔		✔	✔	

Notes :

1. "TICK" denotes applicability.
2. Post order, drawing / document review shall commence only after approval of Document Control Index (DCI).
3. All post order documents shall be submitted / approved through EIL eDMS portal.
4. Final documentation shall be submitted in hard copy (Six prints) and soft (two CDs/DVDs) in addition to submission through EIL eDMS.
5. Refer - 6-78-0001: Specification for quality management system from Bidders.
6. Refer - 6-78-0003: Specification for documentation requirement from Suppliers.
7. All drawings & documents shall be submitted in A4 or A3 paper sizes. Documents in higher paper size shall be submitted in exceptional circumstances or as indicated in the MR/Tender.
8. Post order- The schedule of drawing / data submission shall be mutually agreed between EIL & the bidder / contractor / supplier during finalization of Document Control Index (DCI).
9. "@" indicates submission of documents to Inspection Agency.
10. Bill of Material shall form part of the respective drawing.
11. While submitting drawings and documents for review as indicated in vendor data requirement, vendor must ensure the following:

1. The review of the drawings shall be done as applicable, under the following review codes:

a) Review Code 1: Approved with No Comments.

b) Review Code 2: Proceed with manufacture / fabrication as per commented drawing. Revised drawing

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required.

c) Review Code 3: Document not conforming to basic requirements. Resubmit for review.

d) Review Code R: Retained for records.

12. Review of the vendor drawings by EIL would be only to check compatibility with basic design and concepts and would in no way absolve the manufacturer/ fabricator of his responsibility to meet the applicable codes, specifications and statutory rules and regulations.

13. Any drawing/document not indicated in the list above but required during erection, commissioning of the Pressure Relief Valves shall also be supplied by the Vendor on demand

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SPECIAL INSTRUCTION TO VENDORS

Job No: C050

Project: EPCM Services for setting up Polypropylene Unit at NRL

Client: NRL - REFINERY

Req. No.: C050-1P39A-YR-MR-1360

Rev No.	Date	Purpose	Prepared By	Checked By	Approved By
0	19/Feb/2026	Issued For Bids	PRATYUSH KUMAR SAHOO	SACHIN KUMAR GARG	NARENDRA KAKKAR

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Part A:

I. BIDDING INSTRUCTIONS

A1. Bidders must follow the following guidelines while submitting their offer. Offers not complying with these guidelines shall be rejected summarily without any intimation to the Bidder.

a. Furnish quotations only for those items that bidder can supply strictly as per MR specifications and for which they are approved by EIL.

b. No correspondence whatsoever shall be entered into or entertained after the bid submission.

c. The submission of prices by the vendor shall be construed to mean that they have confirmed compliance with all technical specifications of the corresponding item(s).

d. In case of any contradiction between this bidding instructions and any other documents attached with the MR, this bidding instruction shall govern.

e. Bidder shall submit the price details against each Item No. & Tag No. / Item Code specified in this MR, in the separate price schedule sheet with unit rate. Accessories if any for a tag shall be indicated in the item summary and the price of the accessories shall be included in the base price of the tag itself. No information / description, technical or non-technical, other than what is required shall be filled or submitted.

A2. Bidder is responsible to meet all technical requirements in Material Requisition including Instrument data sheet. If at any stage, till the completion of order, the offered instruments and its accessories are found unsuitable to meet the specification, Vendor shall replace the same with suitable items, without any time/Cost implication.

A3. Bidder shall submit the price for each tag including the price of mandatory spares, drawings, documents, testing requirements, accessories and any other requirements specified in the MR.

A4. There will be pre-bid meeting. Before the pre-bid meeting, bidder shall size the pressure relief valves as per process data given in the MR. In case selected pressure relief valve as per bidder's sizing is different than size and rating given in the MR, bidder shall intimate the same in pre-bid query. However, where higher flange rating is considered in the MR, bidder shall follow the same.

A5. Bidder is responsible to meet all technical requirements in Material Requisition including Instrument data sheet. If at any stage, till the completion of order, the offered valves and its accessories are found unsuitable to meet the specification, bidder shall replace the same with suitable items, without any time/Cost implication.

A6. Bidder to note that the price for each tag shall be inclusive of all testing, documentation etc. No separate charges shall be furnished.

A7. Bidder to note that an alternate offer shall not be furnished. The same, if any, shall be summarily rejected.

A8. The bidder shall submit the required drawing/documents as per the Vendor Data requirements enclosed with the MR.

A9. (i) Bidder shall fill and furnish the following documents along with the offer:

1. COMPLIANCE STATEMENT
2. SIZING CALCULATIONS
3. TECHNICAL QUESTIONAIRE
4. UNPRICED BID (WITHOUT PRICES)
5. FILLED IN DATASHEETS
6. CATALOGUES

THE ABOVE DOCUMENTS ARE THE ONLY BASIS OF TECHNICAL EVALUATION. OFFERS WILL BE EVALUATED BASED ON THE ABOVE-MENTIONED DOCUMENTS ONLY. THEREFORE, BIDDER SHALL TAKE PROPER NOTE OF THIS IMPORTANT REQUIREMENT AND COMPLY.

A10. i) After placement of order, Bidder shall furnish filled in instrument data sheets, complete model no. and model decoding details along with instruments catalogues for inclusion in the PR within 2 weeks of issue of LOI.

ii) Bidder to note that delivery will be reckoned from the date of issue of LOI and any delay in submission of filled in datasheet and resulting delay in delivery shall be in bidder’s account.

PART-B

SPECIFIC JOB REQUIREMENTS

B1. The Pressure relief valves covered in this MR shall be installed in the following units of Numaligarh Refinery (Numaligarh, Dist. Golaghat, Assam, India) EPCM Services for setting up Polypropylene Unit at NRL

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a) Polypropylene Unit (1P39A)
b) Offsite Storage and Transfer (1S82)

B2. Bidder to note that the evaluation shall be carried out, item wise, for all the tags including accessories, drawings, documents, testing & inspection requirements, IBR, Radiography, statutory certification etc. as per individual datasheets and any other requirements specified in the MR.

B3. The Specifications 6-52-0026 for Pressure Relief Valves shall be read in conjunction with this Special Instructions to Vendor and the data sheets enclosed in this Material Requisition. Wherever any discrepancy exists between the above documents, Special Instructions to Vendor and the data sheets shall override. Bidder shall read the valves datasheet specification together with the notes given at the bottom of the datasheets. Each datasheet is provided with General notes & notes specific to that tag no. Bidder shall read the datasheet specification together with these notes given at the bottom of datasheets.

B4. Radiography Requirements:

a) Valve castings and welds shall undergo Radiography as follows:

For all valve castings with ratings ANSI 600# and above or as specified in the individual data sheets, 100% radiography testing shall be applied. The radiography procedure shall be as per ANSI B16.34 and acceptance criteria shall be as per ANSI B16.34 Annexure-B. For areas of casting to be radiographed for valves not covered as per ANSI B16.34, the Bidder shall furnish details of the areas to be radiographed as per ANSI B16.34.

B5. IBR Requirements:

a) Whenever a valve has been specified in the individual datasheet, as being in IBR service, the Bidder shall provide material certificate for the valve construction as per IBR Form-IIIC, duly signed by IBR or its authorized representative.

b) Wherever valves on steam service are specified in data sheets requiring IBR sizing, Bidder shall size the valves as per IBR Clause 295. Bidder shall furnish certificate from IBR for discharge coefficient "C" used in the sizing of this valves. Valves not having IBR certificate with discharge coefficient shall not be accepted in such cases.

c) Bidder shall note that for IBR valves, any valve part that requires welding shall not have a carbon content exceeding0.25%. Also, flanges shall not have sulphur or phosphorous content exceeding 0.05% each.

B6. For all tags where Body and Bonnet material has been specified as 'Carbon Steel', ASTM A 105 or A 216 Gr. WCB are acceptable.

B7. Bidder to comply the requirement of Inlet and Outlet Size and rating of Pressure Relief Valves as specified in the datasheets as a minimum.

B8. For all the tags where spring material has been specified as 'Plated Carbon Steel', 'Nickel plated CS' shall be provided. 'Zinc Plated CS' or 'HTAP coated CS' are also acceptable for the same.

B9. All the items supplied/ integrated by the bidder shall be subject to inspection at bidder's/valve manufacturer's works by TPIA (Third Party Inspection Agency). TPIA shall be arranged by bidder and TPI charges shall be included in base price of individual tag and no additional charges shall be paid by the purchaser.

As a minimum inspection and testing requirements as per 'Standard Specification for Pressure Relief Valves', (6-52-0026), and 'Inspection Test Plan for Pressure Relief Valves', (6-81-2026), and other requirements given in SIV, shall be adhered to.

B10. For all the tags where Cap over Adjustment Bolt has been specified as 'Bolted', Screwed cap shall also be acceptable.

B11. Bidder to note that wherever more than one case is specified in data sheet, the bidder to size the PSV for all cases and select the valve based on the governing case.

B12.Bidder shall furnish a separate quote for 2-year operation spares.

B13. Bidder shall furnish soft copies of all final drawings and data sheets in AutoCAD/ MS Excel formats.

B14. Bidder shall supply the mandatory spares soft parts like gasket, Oring, seal ring, packing material and price for the same shall be included in the base price of each Tag.

B15. SITE CONDITIONS:

The Pressure Relief Valve and accessories covered in the MR shall be suitable for unprotected installation in Hot, Humid and Corrosive environment have following ambient conditions.

Ambient Temperature (Min./Nor./Max.): 5 Deg C/ 35 Deg C/ 38 Deg C

Relative Humidity (Nor.): 85% at 35 Deg C

Maximum Recorded Rainfall: 90 mm for a period of 1hr, 160 mm for a period of 24 hrs.

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TECHNICAL QUESTIONNAIRE

Job No: C050

Project: EPCM Services for setting up Polypropylene Unit at NRL

Client: NRL - REFINERY

Req. No.: C050-1P39A-YR-MR-1360

Rev No.	Date	Purpose	Prepared By	Checked By	Approved By
A	19/Feb/2026	Issued For Bids	PRATYUSH KUMAR SAHOO	SACHIN KUMAR GARG	NARENDRA KAKKAR

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This questinnaire shall be duly filled in and submitted along with the unpriced sets of offers to avoid further queries and to ensure proper evaluation of your offer in time. If this is not compiled with, your offer is liable to be rejected.

ANSWER 'YES' 'NO' OR 'NOT APPLICABLE'

Sr No.	Description	Bidder's Response
1	Have you any deviations to the following: i) General Specifications (clausewise) ii) Special requirements (clausewise) iii) Instrument specifications indicated in the data sheets. iv) The scope of supply as indicated in the material requisition. If `yes' have you included the list of deviations? (If no deviations are furnished, it will be assumed that all the specifications and requirements of the subject requisition are complied with and no deviations whatever will be accepted after the placement of order.)	
2	Have you quoted for the spare parts including consumable items required for the startup and 2 years normal operation/maintenance of the Instruments/Equipments?	
3	Have you quoted for the mounting accessories, special calibration kits and equipments (complete with technical details) required if any, for the erection, commissioning and maintenance of the instruments?	
4	A) Have you enclosed the relevant technical catalogue/Literature in ENGLISH language including model decoding details, drawings etc. necessary for the evaluation of your offer? (NOTE: In case of line mounted instruments, viz. control valves, positive displacement meters, pressure relief valves etc., for all the lines quoted, relevant dimensional details required for the installation must be furnished along with the offer.) B) Have you confirmed that the documents required as per vendor data requirements will be supplied after the placement of order. C) If so, have you indicated the extra price applicable, if any?	
5	Have you furnished sizing, noise level calculations and certified capacity curves for the instruments, wherever applicable?	
6	Have you furnished, separately the Shop inspection charges, if any, for inspection at your works by EIL/Third party? (The details of the tests to be carried out on the instruments during shop inspection are to be furnished)	
7	Have you furnished the certificates from statutory bodies vis. BASEEFA, FM, CSA etc.for the Explosion proof construction / intrinsically safe design of the instruments, wherever specified?	
8	Have you confirmed that IBR certification in Form III(C) or equivalent certification from statutory bodies viz. Lloyds, Bureau veritas, TUV etc.will be furnished wherever specified?	
9	Have you indicated separately the installation and commissioning charges, in case the same are included in your scope of work?	
10	Have you furnished the estimated power / utility consumptions and special cable requirements, if any, for the instruments quoted?	
11	Have you furnished the customer reference list in India/Abroad.	

[ ] Deviation [ ] No Deviation Vendor Seal And Signature

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Notes:
If the answer is NO, then furnish reason thereof.

[] Deviation [] No Deviation Vendor Seal

[ ] Deviation [ ] No Deviation Vendor Seal And Signature

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TECHNICAL COMPLIANCE STATEMENT

(TO BE SIGNED BY BIDDER'S PRINCIPAL CORPORATE LEVEL SIGNATORY ON COMPANY LETTERHEAD)

I, ON BEHALF OF M/s_____ CONFIRM THAT THE PROPOSAL OF ----------

----------QUOTED BY M/s_____ FOR NRL POLYPROPYLENE PLANT, ASSAM AGAINST MATERIAL REQUISITION No. C050-1P39A-YR-MR-1360 (PRESSURE RELIEF VALVES) IS IN TOTAL COMPLIANCE TO THE SCOPE AS WELL AS ALL THE TECHNICAL SPECIFICATION AND NO DEVIATION, VARIATION OR RESERVATION WHATSOEVER HAS BEEN MENTIONED IN THE TECHNICAL OFFER. IT IS FURTHER AGREED THAT THE TECHNICAL DETAILS FURNISHED IN OUR OFFER WILL BE REVIEWED BY EIL/NRL DURING DETAILED ENGINEERING STAGE AFTER ORDER AND ANY CHANGE REQUIRED TO MEET THE REQUIREMENTS OF ENQUIRY SPECIFICATION INCLUDING AMENDMENT(S) (IF ANY) WILL BE INCORPORATED BY US WITHOUT ANY PRICE AND TIME IMPLICATION.

(BIDDER'S SIGNATURE AND STAMP)

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DATASHEET INDEX

PRESSURE RELIEF VALVES

Sl. No.	Tag No.	Datasheet No.	Rev No.
1	1P39A-TSV-110001	C050-1P39A-YR-DS-6000	0
2	1P39A-TSV-110002	C050-1P39A-YR-DS-6001	0
3	1P39A-TSV-155701	C050-1P39A-YR-DS-6002	0
4	1P39A-TSV-165801	C050-1P39A-YR-DS-6003	0
5	1P39A-TSV-165701	C050-1P39A-YR-DS-6004	0
6	1P39A-TSV-420005	C050-1P39A-YR-DS-6005	0
7	1P39A-TSV-420006	C050-1P39A-YR-DS-6006	0
8	1P39A-TSV-420007	C050-1P39A-YR-DS-6007	0
9	1P39A-TSV-420008	C050-1P39A-YR-DS-6008	0
10	1P39A-TSV-315601	C050-1P39A-YR-DS-6009	0
11	1P39A-TSV-420009	C050-1P39A-YR-DS-6010	0
12	1P39A-TSV-420010	C050-1P39A-YR-DS-6011	0
13	1P39A-TSV-605602	C050-1P39A-YR-DS-6012	0
14	1P39A-TSV-605701	C050-1P39A-YR-DS-6014	0
15	1P39A-TSV-665601	C050-1P39A-YR-DS-6015	0
16	1P39A-TSV-420013	C050-1P39A-YR-DS-6016	0
17	1P39A-TSV-915601	C050-1P39A-YR-DS-6017	0
18	1P39A-PSV-600001A	C050-1P39A-YR-DS-6018	0
19	1P39A-PSV-600001B	C050-1P39A-YR-DS-6019	0
20	1P39A-PSV-117101	C050-1P39A-YR-DS-6020	0
21	1P39A-PSV-1172A01	C050-1P39A-YR-DS-6021	0
22	1P39A-PSV-1172B01	C050-1P39A-YR-DS-6022	0
23	1P39A-PSV-1173A01	C050-1P39A-YR-DS-6023	0
24	1P39A-PSV-1173B01	C050-1P39A-YR-DS-6024	0
25	1P39A-PSV-117401	C050-1P39A-YR-DS-6025	0
26	1P39A-PSV-113101	C050-1P39A-YR-DS-6026	0
27	1P39A-PSV-115601	C050-1P39A-YR-DS-6027	0
28	1P39A-PSV-115701	C050-1P39A-YR-DS-6028	0
29	1P39A-PSV-133101	C050-1P39A-YR-DS-6029	0
30	1P39A-PSV-163201	C050-1P39A-YR-DS-6030	0
31	1P39A-PSV-168101A	C050-1P39A-YR-DS-6031	0
32	1P39A-PSV-168101B	C050-1P39A-YR-DS-6032	0
33	1P39A-PSV-165701	C050-1P39A-YR-DS-6033	0
34	1P39A-PSV-165902	C050-1P39A-YR-DS-6034	0
35	1P39A-PSV-160002A	C050-1P39A-YR-DS-6036	0

					Requisition No.	C050-1P39A-YR-MR-1360
0	19-02-2026	PKS	SKG	NK	Order No.	
Rev	Date	By	Chkd	Appd	Vendor	

Legend: * By Vendor

ENGINEERS INDIA LIMITED NEW DELHI	PLANT : PROPYLENE PLANT CLIENT : M/s NRL	SPECIFICATION	REV
		C050-1P39A-16-51-ID-1360	0

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36	1P39A-PSV-160002B	C050-1P39A-YR-DS-6037	0
37	1P39A-PSV-173101	C050-1P39A-YR-DS-6038	0
38	1P39A-PSV-173301	C050-1P39A-YR-DS-6039	0
39	1P39A-PSV-193101	C050-1P39A-YR-DS-6040	0
40	1P39A-PSV-303101	C050-1P39A-YR-DS-6041	0
41	1P39A-PSV-3032A01	C050-1P39A-YR-DS-6042	0
42	1P39A-PSV-3032B01	C050-1P39A-YR-DS-6043	0
43	1P39A-PSV-312101A	C050-1P39A-YR-DS-6044	0
44	1P39A-PSV-312101B	C050-1P39A-YR-DS-6045	0
45	1P39A-PSV-315602	C050-1P39A-YR-DS-6046	0
46	1P39A-PSV-313101	C050-1P39A-YR-DS-6047	0
47	1P39A-PSV-347301A	C050-1P39A-YR-DS-6048	0
48	1P39A-PSV-347301B	C050-1P39A-YR-DS-6049	0
49	1P39A-PSV-600002A	C050-1P39A-YR-DS-6050	0
50	1P39A-PSV-600002B	C050-1P39A-YR-DS-6051	0
51	1P39A-PSV-3433A01A	C050-1P39A-YR-DS-6052	0
52	1P39A-PSV-3433A01B	C050-1P39A-YR-DS-6053	0
53	1P39A-PSV-3433B01A	C050-1P39A-YR-DS-6054	0
54	1P39A-PSV-3433B01B	C050-1P39A-YR-DS-6055	0
55	1P39A-PSV-913101	C050-1P39A-YR-DS-6056	0
56	1S82-TSV-310001	C050-1S82-YR-DS-6000	0
57	1S82-TSV-310002	C050-1S82-YR-DS-6001	0
58	1S82-TSV-310003	C050-1S82-YR-DS-6002	0
59	1S82-TSV-310004	C050-1S82-YR-DS-6003	0
60	1S82-TSV-310005	C050-1S82-YR-DS-6004	0
61	1S82-PSV-3131A01A	C050-1S82-YR-DS-6014	0
62	1S82-PSV-3131A01B	C050-1S82-YR-DS-6015	0
63	1S82-PSV-3131B01A	C050-1S82-YR-DS-6016	0
64	1S82-PSV-3131B01B	C050-1S82-YR-DS-6017	0
65	1S82-TSV-310006	C050-1S82-YR-DS-6005	0
66	1S82-TSV-310007	C050-1S82-YR-DS-6006	0
67	1S82-TSV-310008	C050-1S82-YR-DS-6007	0
68	1S82-TSV-310009	C050-1S82-YR-DS-6008	0
69	1S82-TSV-310010	C050-1S82-YR-DS-6009	0
70	1S82-TSV-310011	C050-1S82-YR-DS-6010	0
71	1S82-TSV-310012	C050-1S82-YR-DS-6011	0
72	1S82-PSV-313201A	C050-1S82-YR-DS-6018	0
73	1S82-PSV-313201B	C050-1S82-YR-DS-6019	0
74	1S82-TSV-310014	C050-1S82-YR-DS-6012	0
75	1S82-TSV-310015	C050-1S82-YR-DS-6013	0

					Requisition No.	C050-1P39A-YR-MR-1360
0	19-02-2026	PKS	SKG	NK	Order No.	
Rev	Date	By	Chkd	Appd	Vendor	

Legend: * By Vendor

ENGINEERS INDIA LIMITED NEW DELHI	PLANT : PROPYLENE PLANT CLIENT : M/s NRL	SPECIFICATION	REV
		C050-1P39A-16-51-ID-1360	0

GENERAL	1	Tag Number		1S82-PSV -3131A01A		
	2	Service		PROPYLENE		
	3	Line No.	Eqp./Line Protected		1S82-TK-3131A	
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated	Conventional		
	7	Bonnet Type		Closed		
	8	Valve Discharge to		Flare		
PROCESS CONDITIONS	9	Fluid	State	Propylene	Vapour	
	10	Required Capacity		100000 kg/h		
	11	Molecular Mass		42.1		
	12	Oper. Pressure	Set Pressure	kgf/cm²-g	22.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	°C	64.6	°C
	14	Back Pressure	Constant	kgf/cm²-g		
	15		Variable	1.7 kgf/cm²-g		
	16		Total			
	17	% Allowable Overpressure		21		
	18	Overpressure Factor				
	19	Compressibility Factor		0.72		
	20	Latent Heat of Vaporization		kcal IT/kg		
	21	Ratio of Specific Heats		1.74		
	22	Relative Density @ Rel. Temp.		kg/m³		
	23	Viscosity @ Rel. Temp.		cP		
	24	Barometric Pressure				
	25	Cold Bench Test Pressure	Blowdown %			
	26	Vessel Wall Temp.	Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code		ASME		
	28	Sizing Basis		.Fire Case		
	29	Calculated Area		4.78 in²		
	30	Selected Area		6.38 in²		
	31	Orifice Designation		P		
	32	Number of Valves	(To Meet Capacity)	1		
	33	Total Capacity		133387.3 kg/h		
	34					
CONNECTIONS	35	Inlet : Size	Rating	4 in	300#	
	36	Facing and Finish		RF, 125AARH		
	37	Outlet: Size	Rating	6 in	150#	
	38	Facing and Finish		RF, 125AARH		
MATERIALS	39	Body and Bonnet		ASTM A 352 GR.LCB		
	40	Nozzle and Disc		SS316		
	41	Resilient Seat Seal				
	42	Guide and Rings				
	43	Spring		SS316		
	44	Bellows				
OPTIONS	45	Cap: Screwed or Bolted		Screwed		
	46	Lever: Plain or Packed		No		
	47	Test Gag		Yes		
TESTS	48	NACE	IBR			
	49	Hydrogen	Radiography			
PURCHASE	50	Manufacturer				
	51	Model				
	52	Purchase Order Number				
	53	Requisition number		C050-1P39A-YR-MR-1360		
	54					

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6014 | Rev.: 0

Tag Number : 1S82-PSV -3131A01A

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1121
3. Sl.No. 13 Operating Temperature: AMBIENT
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. OUTLET IS 2 PHASE.
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. Sl.No.12 Operating Pressure: 5.8-15 kg/cm2g

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6014	Rev.: 0

GENERAL	1	Tag Number		1S82-PSV -3131A01B		
	2	Service		PROPYLENE		
	3	Line No.	Eqp./Line Protected		1S82-TK-3131A	
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated	Conventional		
	7	Bonnet Type		Closed		
	8	Valve Discharge to		Flare		
PROCESS CONDITIONS	9	Fluid	State	Propylene	Vapour	
	10	Required Capacity		100000 kg/h		
	11	Molecular Mass		42.1		
	12	Oper. Pressure	Set Pressure	kgf/cm²-g	23.6	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	°C	64.6	°C
	14	Back Pressure	Constant	kgf/cm²-g		
	15		Variable	1.7 kgf/cm²-g		
	16		Total			
	17	% Allowable Overpressure		15.3		
	18	Overpressure Factor				
	19	Compressibility Factor		0.72		
	20	Latent Heat of Vaporization		kcal IT/kg		
	21	Ratio of Specific Heats		1.74		
	22	Relative Density @ Rel. Temp.		kg/m³		
	23	Viscosity @ Rel. Temp.		cP		
	24	Barometric Pressure				
	25	Cold Bench Test Pressure	Blowdown %			
	26	Vessel Wall Temp.	Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code		ASME		
	28	Sizing Basis		Fire Case		
	29	Calculated Area		4.79 in²		
	30	Selected Area		6.38 in²		
	31	Orifice Designation		P		
	32	Number of Valves	(To Meet Capacity)	1		
	33	Total Capacity		133040.32 kg/h		
	34					
CONNECTIONS	35	Inlet : Size	Rating	4 in	300#	
	36	Facing and Finish		RF, 125AARH		
	37	Outlet: Size	Rating	6 in	150#	
	38	Facing and Finish		RF, 125AARH		
MATERIALS	39	Body and Bonnet		ASTM A 352 GR.LCB		
	40	Nozzle and Disc		SS316		
	41	Resilient Seat Seal				
	42	Guide and Rings				
	43	Spring		SS316		
	44	Bellows				
OPTIONS	45	Cap: Screwed or Bolted		Screwed		
	46	Lever: Plain or Packed		No		
	47	Test Gag		Yes		
TESTS	48	NACE	IBR			
	49	Hydrogen	Radiography			
PURCHASE	50	Manufacturer				
	51	Model				
	52	Purchase Order Number				
	53	Requisition number		C050-1P39A-YR-MR-1360		
	54					

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6015 | Rev.: 0

Tag Number : 1S82-PSV -3131A01B

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1121
3. Sl.No. 13 Operating Temperature: AMBIENT
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. OUTLET IS 2 PHASE.
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. Sl.No.12 Operating Pressure: 5.8-15 kg/cm2g

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6015	Rev.: 0

GENERAL	1	Tag Number		1S82-PSV -3131B01A		
	2	Service		PROPYLENE		
	3	Line No.	Eqp./Line Protected		1S82-TK-3131B	
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated	Conventional		
	7	Bonnet Type		Closed		
	8	Valve Discharge to		Flare		
PROCESS CONDITIONS	9	Fluid	State	Propylene	Vapour	
	10	Required Capacity		100000 kg/h		
	11	Molecular Mass		42.1		
	12	Oper. Pressure	Set Pressure	kgf/cm²-g	22.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	°C	64.6	°C
	14	Back Pressure	Constant	kgf/cm²-g		
	15		Variable	1.7 kgf/cm²-g		
	16		Total			
	17	% Allowable Overpressure		21		
	18	Overpressure Factor				
	19	Compressibility Factor		0.72		
	20	Latent Heat of Vaporization		kcal IT/kg		
	21	Ratio of Specific Heats		1.74		
	22	Relative Density @ Rel. Temp.		kg/m³		
	23	Viscosity @ Rel. Temp.		cP		
	24	Barometric Pressure				
	25	Cold Bench Test Pressure	Blowdown %			
	26	Vessel Wall Temp.	Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code		ASME		
	28	Sizing Basis		Fire Case		
	29	Calculated Area		4.78 in²		
	30	Selected Area		6.38 in²		
	31	Orifice Designation		P		
	32	Number of Valves	(To Meet Capacity)	1		
	33	Total Capacity		133387.3 kg/h		
	34					
CONNECTIONS	35	Inlet : Size	Rating	4 in	300#	
	36	Facing and Finish		RF, 125AARH		
	37	Outlet: Size	Rating	6 in	150#	
	38	Facing and Finish		RF, 125AARH		
MATERIALS	39	Body and Bonnet		ASTM A 352 GR.LCB		
	40	Nozzle and Disc		SS316		
	41	Resilient Seat Seal				
	42	Guide and Rings				
	43	Spring		SS316		
	44	Bellows				
OPTIONS	45	Cap: Screwed or Bolted		Screwed		
	46	Lever: Plain or Packed		No		
	47	Test Gag		Yes		
TESTS	48	NACE	IBR			
	49	Hydrogen	Radiography			
PURCHASE	50	Manufacturer				
	51	Model				
	52	Purchase Order Number				
	53	Requisition number		C050-1P39A-YR-MR-1360		
	54					

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6016 | Rev.: 0

Tag Number : 1S82-PSV -3131B01A

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1121
3. Sl.No. 13 Operating Temperature: AMBIENT
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. OUTLET IS 2 PHASE.
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. Sl.No.12 Operating Pressure: 5.8-15 kg/cm2g

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6016	Rev.: 0

GENERAL	1	Tag Number		1S82-PSV -3131B01B		
	2	Service		PROPYLENE		
	3	Line No.	Eqp./Line Protected		1S82-TK-3131B	
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated	Conventional		
	7	Bonnet Type		Closed		
	8	Valve Discharge to		Flare		
PROCESS CONDITIONS	9	Fluid	State	Propylene	Vapour	
	10	Required Capacity		100000 kg/h		
	11	Molecular Mass		42.1		
	12	Oper. Pressure	Set Pressure	kgf/cm²-g	23.6	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	°C	64.6	°C
	14	Back Pressure	Constant	kgf/cm²-g		
	15		Variable	1.7 kgf/cm²-g		
	16		Total			
	17	% Allowable Overpressure		15.3		
	18	Overpressure Factor				
	19	Compressibility Factor		0.72		
	20	Latent Heat of Vaporization		kcal IT/kg		
	21	Ratio of Specific Heats		1.74		
	22	Relative Density @ Rel. Temp.		kg/m³		
	23	Viscosity @ Rel. Temp.		cP		
	24	Barometric Pressure				
	25	Cold Bench Test Pressure	Blowdown %			
	26	Vessel Wall Temp.	Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code		ASME		
	28	Sizing Basis		Fire Case		
	29	Calculated Area		4.79 in²		
	30	Selected Area		6.38 in²		
	31	Orifice Designation		P		
	32	Number of Valves	(To Meet Capacity)	1		
	33	Total Capacity		133040.32 kg/h		
	34					
CONNECTIONS	35	Inlet : Size	Rating	4 in	300#	
	36	Facing and Finish		RF, 125AARH		
	37	Outlet: Size	Rating	6 in	150#	
	38	Facing and Finish		RF, 125AARH		
MATERIALS	39	Body and Bonnet		ASTM A 352 GR.LCB		
	40	Nozzle and Disc		SS316		
	41	Resilient Seat Seal				
	42	Guide and Rings				
	43	Spring		SS316		
	44	Bellows				
OPTIONS	45	Cap: Screwed or Bolted		Screwed		
	46	Lever: Plain or Packed		No		
	47	Test Gag		Yes		
TESTS	48	NACE	IBR			
	49	Hydrogen	Radiography			
PURCHASE	50	Manufacturer				
	51	Model				
	52	Purchase Order Number				
	53	Requisition number		C050-1P39A-YR-MR-1360		
	54					

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6017 | Rev.: 0

Tag Number : 1S82-PSV -3131B01B

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1121
3. Sl.No. 13 Operating Temperature: AMBIENT
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. OUTLET IS 2 PHASE.
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. Sl.No.12 Operating Pressure: 5.8-15 kg/cm2g

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6017	Rev.: 0

GENERAL	1	Tag Number		1S82-PSV -313201A		
	2	Service		PROPYLENE		
	3	Line No.	Eqp./Line Protected		1S82-TK-3132	
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated	Conventional		
	7	Bonnet Type		Closed		
	8	Valve Discharge to		Flare		
PROCESS CONDITIONS	9	Fluid	State	Propylene	Vapour	
	10	Required Capacity		100000 kg/h		
	11	Molecular Mass		42.1		
	12	Oper. Pressure	Set Pressure	kgf/cm²-g	22.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	°C	64.6	°C
	14	Back Pressure	Constant	kgf/cm²-g		
	15		Variable	1.7 kgf/cm²-g		
	16		Total			
	17	% Allowable Overpressure		21		
	18	Overpressure Factor				
	19	Compressibility Factor		0.72		
	20	Latent Heat of Vaporization		kcal IT/kg		
	21	Ratio of Specific Heats		1.74		
	22	Relative Density @ Rel. Temp.		kg/m³		
	23	Viscosity @ Rel. Temp.		cP		
	24	Barometric Pressure				
	25	Cold Bench Test Pressure	Blowdown %			
	26	Vessel Wall Temp.	Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code		ASME		
	28	Sizing Basis		Fire Case		
	29	Calculated Area		4.78 in²		
	30	Selected Area		6.38 in²		
	31	Orifice Designation		P		
	32	Number of Valves	(To Meet Capacity)	1		
	33	Total Capacity		133387.3 kg/h		
	34					
CONNECTIONS	35	Inlet : Size	Rating	4 in	300#	
	36	Facing and Finish		RF, 125AARH		
	37	Outlet: Size	Rating	6 in	150#	
	38	Facing and Finish		RF, 125AARH		
MATERIALS	39	Body and Bonnet		ASTM A 352 GR.LCB		
	40	Nozzle and Disc		SS316		
	41	Resilient Seat Seal				
	42	Guide and Rings				
	43	Spring		SS316		
	44	Bellows				
OPTIONS	45	Cap: Screwed or Bolted		Screwed		
	46	Lever: Plain or Packed		No		
	47	Test Gag		Yes		
TESTS	48	NACE	IBR			
	49	Hydrogen	Radiography			
PURCHASE	50	Manufacturer				
	51	Model				
	52	Purchase Order Number				
	53	Requisition number		C050-1P39A-YR-MR-1360		
	54					

Notes:

No.	By	Date	Revision
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INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6018 | Rev.: 0

Tag Number : 1S82-PSV -313201A

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1123
3. Sl.No. 13 Operating Temperature: AMBIENT
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. OUTLET IS 2 PHASE.
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. Sl.No.12 Operating Pressure: 5.8-15 kg/cm2g

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6018	Rev.: 0

GENERAL	1	Tag Number		1S82-PSV -313201B		
	2	Service		PROPYLENE		
	3	Line No.	Eqp./Line Protected		1S82-TK-3132	
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated	Conventional		
	7	Bonnet Type		Closed		
	8	Valve Discharge to		Flare		
PROCESS CONDITIONS	9	Fluid	State	Propylene	Vapour	
	10	Required Capacity		100000 kg/h		
	11	Molecular Mass		42.1		
	12	Oper. Pressure	Set Pressure	kgf/cm²-g	23.6	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	°C	64.6	°C
	14	Back Pressure	Constant	kgf/cm²-g		
	15		Variable	1.7 kgf/cm²-g		
	16		Total			
	17	% Allowable Overpressure		15.3		
	18	Overpressure Factor				
	19	Compressibility Factor		0.72		
	20	Latent Heat of Vaporization		kcal IT/kg		
	21	Ratio of Specific Heats		1.74		
	22	Relative Density @ Rel. Temp.		kg/m³		
	23	Viscosity @ Rel. Temp.		cP		
	24	Barometric Pressure				
	25	Cold Bench Test Pressure	Blowdown %			
	26	Vessel Wall Temp.	Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code		ASME		
	28	Sizing Basis		Fire Case		
	29	Calculated Area		4.79 in²		
	30	Selected Area		6.38 in²		
	31	Orifice Designation		P		
	32	Number of Valves	(To Meet Capacity)	1		
	33	Total Capacity		133040.32 kg/h		
	34					
CONNECTIONS	35	Inlet : Size	Rating	4 in	300#	
	36	Facing and Finish		RF, 125AARH		
	37	Outlet: Size	Rating	6 in	150#	
	38	Facing and Finish		RF, 125AARH		
MATERIALS	39	Body and Bonnet		ASTM A 352 GR.LCB		
	40	Nozzle and Disc		SS316		
	41	Resilient Seat Seal				
	42	Guide and Rings				
	43	Spring		SS316		
	44	Bellows				
OPTIONS	45	Cap: Screwed or Bolted		Screwed		
	46	Lever: Plain or Packed		No		
	47	Test Gag		Yes		
TESTS	48	NACE	IBR			
	49	Hydrogen	Radiography			
PURCHASE	50	Manufacturer				
	51	Model				
	52	Purchase Order Number				
	53	Requisition number		C050-1P39A-YR-MR-1360		
	54					

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6019 | Rev.: 0

Tag Number : 1S82-PSV -313201B

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1123
3. Sl.No. 13 Operating Temperature: AMBIENT
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. OUTLET IS 2 PHASE.
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. Sl.No.12 Operating Pressure: 5.8-15 kg/cm2g

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6019	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310001		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	6"-PR-1S82-31001-D64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity				kg/h	
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	39	kgf/cm²-g	66.5 kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	24	°C	°C
	14	Back Pressure		Constant		kgf/cm²-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.			0.05	cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area		°C	in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004	in²	
	30	Selected Area			0.11	in²	
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size		Rating	1	in	600#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2	in	150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6000 | Rev.: 0

Tag Number : 1S82-TSV -310001

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1121
3. Sl.No. 10 Required Capacity: Nominal .
4. Sl. No. 22 Density: 443 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-70 Deg C

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6000	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310002		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	8"-PR-1S82-31024-D64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity				kg/h	
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	16	kgf/cm²-g	69 kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35	°C	°C
	14	Back Pressure		Constant		kgf/cm²-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.			0.05	cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area		°C	in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004	in²	
	30	Selected Area			0.11	in²	
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in		600#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

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Code: 1501 | Doc. No.: C050-1S82-YR-DS-6001 | Rev.: 0

Tag Number : 1S82-TSV -310002

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1121
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-65 Deg C

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6001	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310003		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	8"-PR-1S82-31008-B64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity				kg/h	
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	15	kgf/cm²-g	22.5 kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35	°C	°C
	14	Back Pressure		Constant		kgf/cm²-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.			0.06	cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area		°C	in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004	in²	
	30	Selected Area			0.11	in²	
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in		300#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6002 | Rev.: 0

Tag Number : 1S82-TSV -310003

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1121
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-55 Deg C

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6002	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310004		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	8"-PR-1S82-31033-D64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity				kg/h	
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	16	kgf/cm²-g	69 kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35	°C	°C
	14	Back Pressure		Constant		kgf/cm²-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.			0.05	cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area		°C	in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004	in²	
	30	Selected Area			0.11	in²	
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size		Rating	1	in	600#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2	in	150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6003 | Rev.: 0

Tag Number : 1S82-TSV -310004

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1121
3. Sl.No. 10 Required Capacity: Nominal
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-65 Deg C

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6003	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310005		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	8"-PR-1S82-31009-B64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	15 kgf/cm²-g	22.5	kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35 °C		°C
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			0.06 cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C		in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004 in²		
	30	Selected Area			0.11 in²		
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in		300#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6004 | Rev.: 0

Tag Number : 1S82-TSV -310005

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1121
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-55 Deg C

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6004	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310006		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	6"-PR-1S82-31012-D64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene	Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	16 kgf/cm²-g	69 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	35 °C	°C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			0.05 cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004 in²		
	30	Selected Area			0.11 in²		
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in	600#	
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in	150#	
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6005 | Rev.: 0

Tag Number : 1S82-TSV -310006

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1122
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-65 Deg C

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6005	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310007		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	4"-PR-1S82-31015-D64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35 °C		°C
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			0.05 cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C		in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004 in²		
	30	Selected Area			0.11 in²		
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in		600#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6006 | Rev.: 0

Tag Number : 1S82-TSV -310007

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1122
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Operating Pressure: 41-47 kg/cm2g
9. Sl.No. 13 Relieving Temperature: AMBIENT-65 Deg C

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6006	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310008		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	6"-PR-1S82-31084-D64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35 °C		°C
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			0.05 cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C		in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004 in²		
	30	Selected Area			0.11 in²		
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in		600#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6007 | Rev.: 0

Tag Number : 1S82-TSV -310008

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1122
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Operating Pressure: 41-47 kg/cm2g
9. Sl.No. 13 Relieving Temperature: AMBIENT-65 Deg C

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6007	Rev.: 0

GENERAL	1	Tag Number		1S82-TSV -310009			
	2	Service		PROPYLENE			
	3	Line No.	Eqp./Line Protected	6"-PR-1S82-31042-D64I			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Propylene		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	39	kgf/cm²-g	66.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	24	°C		°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		25			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.05	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		K			
	29	Calculated Area		0.000004	in²		
	30	Selected Area		0.11	in²		
	31	Orifice Designation		D			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 350 GR.LF2 CL.1			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		SS316			
	44	Bellows		SS316L			
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6008 | Rev.: 0

Tag Number : 1S82-TSV -310009

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1123
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 443 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-70 Deg C

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6008	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310010		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	8"-PR-1S82-31046-D64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity				kg/h	
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	16	kgf/cm²-g	69 kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35	°C	°C
	14	Back Pressure		Constant		kgf/cm²-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.			0.05	cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area		°C	in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004	in²	
	30	Selected Area			0.11	in²	
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size		Rating	1	in	600#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2	in	150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

				INSTRUMENT SPECIFICATION Pressure Relief Valve Project : NRL_NREP Job No : C050 Unit No : PROPYLENE	
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 1 of 2
No.	By	Date	Revision	Code: 1501	Doc. No.: C050-1S82-YR-DS-6009 Rev.: 0

Tag Number : 1S82-TSV -310010

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1123
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-65 Deg C

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6009	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310011		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	6"-PR-1S82-31050-B64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	15	kgf/cm²-g	22.5 kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35	°C	°C
	14	Back Pressure		Constant		kgf/cm²-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			0.06	cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C		in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004	in²	
	30	Selected Area			0.11	in²	
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in		300#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6010 | Rev.: 0

Tag Number : 1S82-TSV -310011

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1123
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-55 Deg C

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6010	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310012		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	6"-PR-1S82-31051-B64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity				kg/h	
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	15	kgf/cm²-g	22.5 kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35	°C	°C
	14	Back Pressure		Constant		kgf/cm²-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.			0.06	cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area		°C	in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004	in²	
	30	Selected Area			0.11	in²	
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size		Rating	1	in	300#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2	in	150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6011 | Rev.: 0

Tag Number : 1S82-TSV -310012

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1123
3. Sl.No. 10 Required Capacity: Nominal
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-55 Deg C

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6011	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310014		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	4"-PR-1S82-31060-D64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity				kg/h	
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	16	kgf/cm²-g	56.2 kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35	°C	°C
	14	Back Pressure		Constant		kgf/cm²-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.			0.05	cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area		°C	in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004	in²	
	30	Selected Area			0.11	in²	
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size		Rating	1	in	600#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2	in	150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6012 | Rev.: 0

Tag Number : 1S82-TSV -310014

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1124
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-65 Deg C

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6012	Rev.: 0

GENERAL	1	Tag Number			1S82-TSV -310015		
	2	Service			PROPYLENE		
	3	Line No.		Eqp./Line Protected	4"-PR-1S82-31055-D64I		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Liquid
	10	Required Capacity				kg/h	
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	16	kgf/cm²-g	56.2 kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	35	°C	°C
	14	Back Pressure		Constant		kgf/cm²-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.			0.05	cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area		°C	in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004	in²	
	30	Selected Area			0.11	in²	
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in		600#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PROPYLENE

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1S82-YR-DS-6013 | Rev.: 0

Tag Number : 1S82-TSV -310015

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1S82-1124
3. Sl.No. 10 Required Capacity: Nominal.
4. Sl. No. 22 Density: 450 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. OUTLET IS 2 PHASE.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
8. Sl.No. 13 Relieving Temperature: AMBIENT-65 Deg C

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1S82-YR-DS-6013	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -113101			
	2	Service		Propylene			
	3	Line No.	Eqp./Line Protected	2"-PR-1P39-11165-D64I-IE			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Propylene		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		42.01			
	12	Oper. Pressure	Set Pressure	37.5	kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	81	°C	503.5	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.99			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.1			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	2	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.01	in²		
	30	Selected Area		0.11	in²		
	31	Orifice Designation		D			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		145		kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 350 GR.LF2 CL.1			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6026 | Rev.: 0

Tag Number : 1P39A-PSV -113101

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-1104.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/120 Deg C & Design Pressure: 69 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Relieving condition in supercritical phase. Fluid at critical pressure 46.1kg/cm²(g) and critical temperature 91.78°C.

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2 of 2	
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6026	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -115601		
	2	Service			Steam		
	3	Line No.		Eqp./Line Protected	2"-LPS-1P39-91104-D2A-IH		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Open		
	8	Valve Discharge to			ATM		
PROCESS CONDITIONS	9	Fluid		State	Steam	Vapor	
	10	Required Capacity			200 kg/h		
	11	Molecular Mass			18		
	12	Oper. Pressure		Set Pressure	1.5 kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature	156.5 °C	298	°C
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	0 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			21		
	18	Overpressure Factor					
	19	Compressibility Factor			0.72		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			2		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Fire Case		
	29	Calculated Area			0.01 in²		
	30	Selected Area			0.11 in²		
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			3595 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in	600#	
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in	150#	
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A105 (NORMALIZED)		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			Tungsten Alloy Steel		
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			Plain		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR		Yes	
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6027 | Rev.: 0

Tag Number : 1P39A-PSV -115601

1. This valve is in IBR service.Refer SIV.
2. P&ID No. C050-79-41-1P39A-1104.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: 200 Deg C & Design Pressure: 69/FV kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6027	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -115701			
	2	Service		Steam			
	3	Line No.	Eqp./Line Protected	2"-LPS-1P39-91106-D2A-IH			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Steam		Vapor	
	10	Required Capacity		200	kg/h		
	11	Molecular Mass		18			
	12	Oper. Pressure	Set Pressure	1.5	kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	156.5	°C	298	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.72			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		2			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Fire Case			
	29	Calculated Area		0.01	in²		
	30	Selected Area		0.11	in²		
	31	Orifice Designation		D			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		3595	kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A105 (NORMALIZED)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6028 | Rev.: 0

Tag Number : 1P39A-PSV -115701

1.This valve is in IBR service.Refer SIV.
2. P&ID No. C050-79-41-1P39A-1104.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: 200 Deg C & Design Pressure: 69/FV kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6028	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -117101			
	2	Service		Propylene			
	3	Line No.	Eqp./Line Protected	3"-PR-1P39-11005-D64I-NI			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Propylene		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		42.01			
	12	Oper. Pressure	Set Pressure	39	kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	40	°C	388	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.99			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.1			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	80.41	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.25	in²		
	30	Selected Area		0.307	in²		
	31	Orifice Designation		F			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		10008	kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating	1.5	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 350 GR.LF2 CL.1			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6020 | Rev.: 0

Tag Number : 1P39A-PSV -117101

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-1100.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/70 Deg C & Design Pressure: 69 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Relieving condition in supercritical phase. Fluid at critical pressure 46.1kg/cm²(g) and critical temperature 91.78°C.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
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No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6020	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -1172A01			
	2	Service		Propylene			
	3	Line No.	Eqp./Line Protected	3"-PR-1P39-11018-D64I-NI			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Propylene		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		42.01			
	12	Oper. Pressure	Set Pressure	38.7	kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	40	°C	393	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.99			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.1			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	99.15	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.31	in²		
	30	Selected Area		0.503	in²		
	31	Orifice Designation		G			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		16336		kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1.5	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	3	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 350 GR.LF2 CL.1			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6021 | Rev.: 0

Tag Number : 1P39A-PSV -1172A01

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-1101.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/70 Deg C & Design Pressure: 69 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Relieving condition in supercritical phase. Fluid at critical pressure 46.1kg/cm²(g) and critical temperature 91.78°C.
7. Mechanical design pressure and temperature for regeneration case: 6.5 kg/cm2 g and 280°C.
8. Operating conditions up to 250°C and 4 kg/cm² g during regeneration.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6021	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -1172B01		
	2	Service			Propylene		
	3	Line No.		Eqp./Line Protected	3"-PR-1P39-11020-D64I-NI		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Propylene		Vapor
	10	Required Capacity				kg/h	
	11	Molecular Mass			42.01		
	12	Oper. Pressure		Set Pressure	38.7	kgf/cm²-g	69
	13	Oper. Temperature		RelievingTemperature	40	°C	393 °C
	14	Back Pressure		Constant		bar-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			21		
	18	Overpressure Factor					
	19	Compressibility Factor			0.99		
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats			1.1		
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.				cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	593	°C	99.15 m²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			External Fire-Gas Filled		
	29	Calculated Area			0.31	in²	
	30	Selected Area			0.503	in²	
	31	Orifice Designation			G		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			16418	kg/h	
	34						
CONNECTIONS	35	Inlet : Size		Rating	1.5 in		600#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	3 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			Tungsten Alloy Steel		
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6022 | Rev.: 0

Tag Number : 1P39A-PSV -1172B01

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-1101.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/70 Deg C & Design Pressure: 69 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Relieving condition in supercritical phase. Fluid at critical pressure 46.1kg/cm²(g) and critical temperature 91.78°C.
7. Mechanical design pressure and temperature for regeneration case: 6.5 kg/cm2 g and 280°C.
8. Operating conditions up to 250°C and 4 kg/cm² g during regeneration.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6022	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -1173A01			
	2	Service		Propylene			
	3	Line No.	Eqp./Line Protected	2"-PR-1P39-11037-D64I-NI			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Propylene		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		42.01			
	12	Oper. Pressure	Set Pressure	38.4	kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	40	°C	398	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.99			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.1			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	34.85	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.108	in²		
	30	Selected Area		0.196	in²		
	31	Orifice Designation		E			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		3576.8		kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 350 GR.LF2 CL.1			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6023 | Rev.: 0

Tag Number : 1P39A-PSV -1173A01

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-1102.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/70 Deg C & Design Pressure: 69 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Relieving condition in supercritical phase. Fluid at critical pressure 46.1kg/cm²(g) and critical temperature 91.78°C.
7. Mechanical design pressure and temperature for regeneration case: 6.5 kg/cm2 g and 230°C.
8. Operating conditions up to 200°C and 3 kg/cm² g during regeneration.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6023	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -1173B01			
	2	Service		Propylene			
	3	Line No.	Eqp./Line Protected	2"-PR-1P39-11039-D64I-NI			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Propylene		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		42.01			
	12	Oper. Pressure	Set Pressure	38.4	kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	40	°C	398	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.99			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.1			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	34.85	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.108	in²		
	30	Selected Area		0.196	in²		
	31	Orifice Designation		E			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		3576.8		kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 350 GR.LF2 CL.1			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6024 | Rev.: 0

Tag Number : 1P39A-PSV -1173B01

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-1102.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/70 Deg C & Design Pressure: 69 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Relieving condition in supercritical phase. Fluid at critical pressure 46.1kg/cm²(g) and critical temperature 91.78°C.
7. Mechanical design pressure and temperature for regeneration case: 6.5 kg/cm2 g and 230°C.
8. Operating conditions up to 200°C and 3 kg/cm² g during regeneration.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6024	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -117401			
	2	Service		Propylene			
	3	Line No.	Eqp./Line Protected	2"-PR-1P39-11053-D64I-NI			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Propylene		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		42.01			
	12	Oper. Pressure	Set Pressure	38.1	kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	40	°C	403	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.99			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.1			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	27.64	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.09	in²		
	30	Selected Area		0.11	in²		
	31	Orifice Designation		D			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 350 GR.LF2 CL.1			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6025 | Rev.: 0

Tag Number : 1P39A-PSV -117401

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-1103.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/70 Deg C & Design Pressure: 69 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Relieving condition in supercritical phase. Fluid at critical pressure 46.1kg/cm²(g) and critical temperature 91.78°C.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6025	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -133101			
	2	Service		1P39-VV-1331			
	3	Line No.	Eqp./Line Protected	6"-IG-1P39-16029-A1K-NI			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Bellows			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	White Oil		Vapor	
	10	Required Capacity		13826	kg/h		
	11	Molecular Mass		300			
	12	Oper. Pressure	Set Pressure	2	kgf/cm²-g	6.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	50	°C	483	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.6			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.11			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Fire Case			
	29	Calculated Area		1.23	in²		
	30	Selected Area		1.287	in²		
	31	Orifice Designation		J			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		14433.82	kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating	3	in	300#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	4	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 351 GR.CF8			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows		SS 316L			
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6029 | Rev.: 0

Tag Number : 1P39A-PSV -133101

1. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS304/SS304L) CERTIFIED. CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL BE ENSURED.
2. P&ID No. C050-79-41-1P39A-1300.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: 150 Deg C & Design Pressure: 6.5/FV kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6029	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -160002A		
	2	Service			HP nitrogen header		
	3	Line No.	Eqp./Line Protected		3"-IG-1P39-16065-B1A-NI		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			ATM		
PROCESS CONDITIONS	9	Fluid	State		Nitrogen		Vapor
	10	Required Capacity			4100 kg/h		
	11	Molecular Mass			28.01		
	12	Oper. Pressure	Set Pressure		32 kgf/cm²-g	40	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature		35 °C	37	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable		0 kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			0.99		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.5		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Control valve(1P39-PV-160010A/B)failure		
	29	Calculated Area			0.18 in²		
	30	Selected Area			0.196 in²		
	31	Orifice Designation			E		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			4487.02 kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating		1 in		300#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size	Rating		2 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A105 (NORMALIZED)		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6036 | Rev.: 0

Tag Number : 1P39A-PSV -160002A

1. P&ID No. C050-79-41-1P39A-1601.01
2. Sl. No. 27 Design Code shall be as per ASME / API 520
3. Design Temperature: 65 Deg C & Design Pressure: 40 kg/cm2g
4. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2 of 2	
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6036	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -160002B		
	2	Service			HP nitrogen header		
	3	Line No.	Eqp./Line Protected		3"-IG-1P39-16137-B1A-NI		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			ATM		
PROCESS CONDITIONS	9	Fluid	State		Nitrogen		Vapor
	10	Required Capacity			4100 kg/h		
	11	Molecular Mass			28.01		
	12	Oper. Pressure	Set Pressure		32 kgf/cm²-g	40	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature		35 °C	37	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable		0 kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			0.99		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.5		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Control valve(1P39-PV-160010A/B)failure		
	29	Calculated Area			0.18 in²		
	30	Selected Area			0.196 in²		
	31	Orifice Designation			E		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			4487.02 kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating		1 in		300#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size	Rating		2 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A105 (NORMALIZED)		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6037 | Rev.: 0

Tag Number : 1P39A-PSV -160002B

1. P&ID No. C050-79-41-1P39A-1601.01
2. Sl. No. 27 Design Code shall be as per ASME / API 520
3. Design Temperature: 65 Deg C & Design Pressure: 40 kg/cm2g
4. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2 of 2	
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6037	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -163201			
	2	Service		Nitrogen			
	3	Line No.	Eqp./Line Protected	2"-IG-1P39-16045-A1A-NI			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Bellows			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Nitrogen		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		28.01			
	12	Oper. Pressure	Set Pressure	2.5	kgf/cm²-g	6.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	47	°C	533	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		1			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.38			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	8	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.076	in²		
	30	Selected Area		0.11	in²		
	31	Orifice Designation		D			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		302.69	kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	150#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A105 (NORMALIZED)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows		SS 316L			
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6030 | Rev.: 0

Tag Number : 1P39A-PSV -163201

1. P&ID No. C050-79-41-1P39A-1600.01
2. Sl. No. 27 Design Code shall be as per ASME / API 520
3. Design Temperature: 65 Deg C & Design Pressure: 6.5 kg/cm2g
4. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6030	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -165701			
	2	Service		LP nitrogen regeneration line			
	3	Line No.	Eqp./Line Protected	2"-IG-1P39-16260-A1A-IS			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Bellows			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Nitrogen		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		28.01			
	12	Oper. Pressure	Set Pressure	5.2	kgf/cm²-g	6.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	119.5	°C	289	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		1			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.38			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	4.5	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.05	in²		
	30	Selected Area		0.11	in²		
	31	Orifice Designation		D			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		362.48		kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	150#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A105 (NORMALIZED)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows		SS 316L			
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6033 | Rev.: 0

Tag Number : 1P39A-PSV -165701

1. P&ID No. C050-79-41-1P39A-1600.02
2. Sl. No. 27 Design Code shall be as per ASME / API 520
3. Design Temperature: 150 Deg C & Design Pressure: 6.5 kg/cm2g
4. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6033	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -165902			
	2	Service		Nitrogen			
	3	Line No.	Eqp./Line Protected	2"-IG-1P39-16260-A1A-IS			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Bellows			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Nitrogen		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		28.01			
	12	Oper. Pressure	Set Pressure	5.2	kgf/cm²-g	6.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	120	°C	288	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		1			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.38			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	4.5	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.05	in²		
	30	Selected Area		0.11	in²		
	31	Orifice Designation		D			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		362.8		kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	150#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A105 (NORMALIZED)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows		SS 316L			
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6034 | Rev.: 0

Tag Number : 1P39A-PSV -165902

1. P&ID No. C050-79-41-1P39A-1600.02
2. Sl. No. 27 Design Code shall be as per ASME / API 520
3. Design Temperature: 150 Deg C & Design Pressure: 6.5 kg/cm2g
4. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6034	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -168101A		
	2	Service			LP Nitrogen Regeneration Line		
	3	Line No.		Eqp./Line Protected	6"-IG-1P39-16041-A1A-IS		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Nitrogen	Vapor	
	10	Required Capacity			5400 kg/h		
	11	Molecular Mass			28.01		
	12	Oper. Pressure		Set Pressure	5.63 kgf/cm²-g	6.5 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	120 °C	120 °C	
	14	Back Pressure		Constant	bar-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			1		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.41		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Overpressure		
	29	Calculated Area			1.48 in²		
	30	Selected Area			1.838 in²		
	31	Orifice Designation			K		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			6697.16 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	3 in	150#	
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	4 in	150#	
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A216 Gr. WCB		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows			SS 316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6031 | Rev.: 0

Tag Number : 1P39A-PSV -168101A

1. P&ID No. C050-79-41-1P39A-1600.01
2. Sl. No. 27 Design Code shall be as per ASME / API 520
3. Design Temperature: 150 Deg C & Design Pressure: 6.5 kg/cm2g
4. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6031	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -168101B		
	2	Service			LP nitrogen regeneration line		
	3	Line No.	Eqp./Line Protected		6"-IG-1P39-16124-A1A-IS		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid	State		Nitrogen		Vapor
	10	Required Capacity			5400 kg/h		
	11	Molecular Mass			28.01		
	12	Oper. Pressure	Set Pressure		5.63 kgf/cm²-g	6.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature		120 °C	120	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable		1.7 kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			1		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.41		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Overpressure		
	29	Calculated Area			1.48 in²		
	30	Selected Area			1.838 in²		
	31	Orifice Designation			K		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			6697.16 kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating		3 in		150#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size	Rating		4 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A216 Gr. WCB		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows			SS 316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6032 | Rev.: 0

Tag Number : 1P39A-PSV -168101B

1. P&ID No. C050-79-41-1P39A-1600.01
2. Sl. No. 27 Design Code shall be as per ASME / API 520
3. Design Temperature: 150 Deg C & Design Pressure: 6.5 kg/cm2g
4. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6032	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -173101			
	2	Service		TEA/Nitrogen			
	3	Line No.	Eqp./Line Protected	4"-TEA-1P39-17003-D60K-IE			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Fire Pit			
PROCESS CONDITIONS	9	Fluid	State	TEA/Nitrogen		Vapor	
	10	Required Capacity		3831	kg/h		
	11	Molecular Mass		114			
	12	Oper. Pressure	Set Pressure	2	kgf/cm²-g	6.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	35	°C	269	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.91			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.05			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Fire Case			
	29	Calculated Area		0.59	in²		
	30	Selected Area		0.79	in²		
	31	Orifice Designation		H			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1.5	in	600#	
	36	Facing and Finish		LGGR/MAX125AARH			
	37	Outlet: Size	Rating	3	in	600#	
	38	Facing and Finish		LGGR/MAX125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 182 GR.F304			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		Tungsten Alloy Steel			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6038 | Rev.: 0

Tag Number : 1P39A-PSV -173101

1.ALL WELDS 100% X-RAYED.
2. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS304/SS304L) CERTIFIED.CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL
BE ENSURED.
3. P&ID No. C050-79-41-1P39A-1700.01
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 6.5/FV kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. TEA is hazardous in terms of self igniting with air/water.
8. Latent heat of vaporization for fire relief load estimation to be used as 432 kJ/kg.
9. USE THIS FLANGE IN CASE OF LGTG COMPANION FLANGE FACING.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6038	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -173301		
	2	Service			1P39-VV-1733		
	3	Line No.		Eqp./Line Protected	3"-OC-1P39-13017-D60K-NI		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	White Oil / IPA	Vapor	
	10	Required Capacity			3831 kg/h		
	11	Molecular Mass			300		
	12	Oper. Pressure		Set Pressure	1.5 kgf/cm²-g	6.5 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	50 °C	483 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			21		
	18	Overpressure Factor					
	19	Compressibility Factor			0.6		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.11		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Fire Case		
	29	Calculated Area			0.34 in²		
	30	Selected Area			0.5 in²		
	31	Orifice Designation			G		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			5641.21 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1.5 in	600#	
	36	Facing and Finish			LGGR/MAX125AARH		
	37	Outlet: Size		Rating	3 in	600#	
	38	Facing and Finish			LGGR/MAX125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 182 GR.F304		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			Tungsten Alloy Steel		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6039 | Rev.: 0

Tag Number : 1P39A-PSV -173301

1.ALL WELDS 100% X-RAYED.
2. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS304/SS304L) CERTIFIED.CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL
BE ENSURED.
3. P&ID No. C050-79-41-1P39A-1700.02
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 6.5/FV kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. Latent heat of vaporization for fire relief load estimation to be used as 115 kJ/kg.
8. USE THIS FLANGE IN CASE OF LGTG COMPANION FLANGE FACING.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6039	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -193101		
	2	Service			Silane / N2		
	3	Line No.		Eqp./Line Protected	2"-IG-1P39-16077-A1K-NI		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Silane / N2	Vapor	
	10	Required Capacity			1140 kg/h		
	11	Molecular Mass			190		
	12	Oper. Pressure		Set Pressure	2 kgf/cm²-g	6.5 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	35 °C	220 °C	
	14	Back Pressure		Constant	bar-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			21		
	18	Overpressure Factor					
	19	Compressibility Factor			0.85		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.49		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Fire Case		
	29	Calculated Area			0.11 in²		
	30	Selected Area			0.196 in²		
	31	Orifice Designation			E		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			2019.26 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in	150#	
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in	150#	
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 182 GR.F304		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6040 | Rev.: 0

Tag Number : 1P39A-PSV -193101

1. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS304/SS304L) CERTIFIED. CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALLBE ENSURED.
2. P&ID No. C050-79-41-1P39A-1900.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: 65 Deg C & Design Pressure: 6.5/FV kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Latent heat of vaporization for fire relief load estimation to be used as 465 kJ/kg.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6040	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -303101		
	2	Service			White Oil/Catalyst		
	3	Line No.		Eqp./Line Protected	3"-CT-1P39-30050-A60M-NI		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief with Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	White Oil/Catalyst	Vapor	
	10	Required Capacity			3928 kg/h		
	11	Molecular Mass			300		
	12	Oper. Pressure		Set Pressure	0.2 kgf/cm²-g	6.5 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	50 °C	483 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			21		
	18	Overpressure Factor					
	19	Compressibility Factor			0.6		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.11		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Fire Case		
	29	Calculated Area			0.35 in²		
	30	Selected Area			0.5 in²		
	31	Orifice Designation			G		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			5641.21 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1.5 in	300#	
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	3 in	150#	
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 182 GR.F316		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			Tungsten Alloy Steel		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6041 | Rev.: 0

Tag Number : 1P39A-PSV -303101

1. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS316/SS316L) CERTIFIED. CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL BE ENSURED.
2. P&ID No. C050-79-41-1P39A-3000.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: 65 Deg C & Design Pressure: 6.5 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Accurate value of latent heat of vaporization for catalyst slurry is not available and to be used as 115 kJ/kg per API 521.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6041	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -3032A01		
	2	Service			White Oil/Catalyst		
	3	Line No.		Eqp./Line Protected	3"-CT-1P39-30008-A60M-NI		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief with Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	White Oil/Catalyst	Vapor	
	10	Required Capacity			6454 kg/h		
	11	Molecular Mass			300		
	12	Oper. Pressure		Set Pressure	0.2 kgf/cm²-g	6.5 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	50 °C	483 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			21		
	18	Overpressure Factor					
	19	Compressibility Factor			0.6		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.11		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Fire Case		
	29	Calculated Area			0.58 in²		
	30	Selected Area			0.79 in²		
	31	Orifice Designation			H		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			8803.87 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	2 in	300#	
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	3 in	150#	
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 351 GR.CF8M / ASTM A 182 GR.F316		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			Tungsten Alloy Steel		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6042 | Rev.: 0

Tag Number : 1P39A-PSV -3032A01

1. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS316/SS316L) CERTIFIED. CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL
BE ENSURED.
2. P&ID No. C050-79-41-1P39A-3001.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: 65 Deg C & Design Pressure: 6.5 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Accurate value of latent heat of vaporization for catalyst slurry is not available and to be used as 115 kJ/kg per API 521.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6042	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -3032B01		
	2	Service			White Oil/Catalyst		
	3	Line No.	Eqp./Line Protected		3"-CT-1P39-30015-A60M-IE		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief with Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid	State		White Oil/Catalyst	Vapor	
	10	Required Capacity			6454 kg/h		
	11	Molecular Mass			300		
	12	Oper. Pressure	Set Pressure		0.2 kgf/cm²-g	6.5 kgf/cm²-g	
	13	Oper. Temperature	RelievingTemperature		50 °C	483 °C	
	14	Back Pressure	Constant		bar-g		
	15		Variable		1.7 kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure			21		
	18	Overpressure Factor					
	19	Compressibility Factor			0.6		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.11		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Fire Case		
	29	Calculated Area			0.58 in²		
	30	Selected Area			0.79 in²		
	31	Orifice Designation			H		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			8803.87 kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating		2 in	300#	
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size	Rating		3 in	150#	
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 351 GR.CF8M / ASTM A 182 GR.F316		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			Tungsten Alloy Steel		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
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INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6043 | Rev.: 0

Tag Number : 1P39A-PSV -3032B01

1. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS316/SS316L) CERTIFIED. CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL
BE ENSURED.
2. P&ID No. C050-79-41-1P39A-3001.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: 65 Deg C & Design Pressure: 6.5 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. Accurate value of latent heat of vaporization for catalyst slurry is not available and to be used as 115 kJ/kg per API 521.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6043	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -312101A			
	2	Service		Recycle Gas			
	3	Line No.	Eqp./Line Protected	6"-PV-1P39-60006-B64I-IH			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Recycle Gas		Vapor	
	10	Required Capacity		50000	kg/h		
	11	Molecular Mass		41			
	12	Oper. Pressure	Set Pressure	30	kgf/cm²-g	38	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	80	°C	125	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor		0.83			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.26			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Local power failure/ Local CW failure			
	29	Calculated Area		2.09	in²		
	30	Selected Area		2.85	in²		
	31	Orifice Designation		L			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		68204.97	kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating	4	in	300#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	6	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 352 GR.LCB			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		SS316			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6044 | Rev.: 0

Tag Number : 1P39A-PSV -312101A

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-3101.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/160 Deg C & Design Pressure: 40 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2 of 2	
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6044	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -312101B		
	2	Service			Recycle Gas		
	3	Line No.		Eqp./Line Protected	6"-PV-1P39-60006-B64I-IH		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Recycle Gas	Vapor	
	10	Required Capacity			50000 kg/h		
	11	Molecular Mass			41		
	12	Oper. Pressure		Set Pressure	30 kgf/cm²-g	38 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	80 °C	125 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			0.83		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.26		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Local power failure/ Local CW failure		
	29	Calculated Area			2.09 in²		
	30	Selected Area			2.85 in²		
	31	Orifice Designation			L		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			68204.97 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	4 in	300#	
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	6 in	150#	
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 352 GR.LCB		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6045 | Rev.: 0

Tag Number : 1P39A-PSV -312101B

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-3101.00
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/160 Deg C & Design Pressure: 40 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2 of 2	
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6045	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -313101			
	2	Service		Recycle Gas			
	3	Line No.	Eqp./Line Protected	1.5"-PV-1P39-60044-D1K-IT			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Recycle Gas		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		42			
	12	Oper. Pressure	Set Pressure	28.7	kgf/cm²-g	40	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	50	°C	95	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.7			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		2.2			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	16.12	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.08	in²		
	30	Selected Area		0.11	in²		
	31	Orifice Designation		D			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		3507.1		kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 182 GR.F304			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6047 | Rev.: 0

Tag Number : 1P39A-PSV -313101

1. IMPACT TESTING REQUIRED FOR ALL WELDED ITEMS. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370.
2. P&ID No. C050-79-41-1P39A-3103.02
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/160 Deg C & Design Pressure: 40 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS304/SS304L) CERTIFIED.CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL BE ENSURED.

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2 of 2	
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6047	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -315602			
	2	Service		Recycle Gas			
	3	Line No.	Eqp./Line Protected	4"-PV-1P39-60037-D1K-IT			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Recycle Gas		Vapor	
	10	Required Capacity			kg/h		
	11	Molecular Mass		42.1			
	12	Oper. Pressure	Set Pressure	28.8	kgf/cm²-g	38	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	50	°C	100	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		21			
	18	Overpressure Factor					
	19	Compressibility Factor		0.51			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		2.72			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area	593	°C	120	m²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		External Fire-Gas Filled			
	29	Calculated Area		0.63	in²		
	30	Selected Area		0.79	in²		
	31	Orifice Designation		H			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	2	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	3	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 351 GR.CF8			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6046 | Rev.: 0

Tag Number : 1P39A-PSV -315602

1. IMPACT TESTING REQUIRED FOR ALL WELDED ITEMS. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370.
2. P&ID No. C050-79-41-1P39A-3103.01
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: -48/160 Deg C & Design Pressure: 40 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
6. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS304/SS304L) CERTIFIED.CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL BE ENSURED.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6046	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -3433A01A		
	2	Service			Purge Gas		
	3	Line No.		Eqp./Line Protected	3"-PV-1P39-65005-A61K-IS		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Purge Gas	Vapor	
	10	Required Capacity			1473 kg/h		
	11	Molecular Mass			34		
	12	Oper. Pressure		Set Pressure	0.3 kgf/cm²-g	6.5 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	°C	73 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			1		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.21		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Blocked Outlet		
	29	Calculated Area			0.36 in²		
	30	Selected Area			0.5 in²		
	31	Orifice Designation			G		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			2039.3 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1.5 in	150#	
	36	Facing and Finish			STK/MAX1000AARH		
	37	Outlet: Size		Rating	3 in	150#	
	38	Facing and Finish			STK/MAX1000AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6052 | Rev.: 0

Tag Number : 1P39A-PSV -3433A01A

1. Sl. No. 13 Operating Temperature: 70-100 Deg C
2. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS304/SS304L) CERTIFIED.CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL BE ENSURED.
3. P&ID No. C050-79-41-1P39A-3401.01
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 130 Deg C & Design Pressure: 6.5/FV kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7.SPECIAL SO FLANGE SHALL BE USED. REFER JOB SPECIFIC SKETCH.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6052	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -3433A01B		
	2	Service			1P39-VV-3433A		
	3	Line No.		Eqp./Line Protected	3"-PV-1P39-65004-A61K-IS		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Purge Gas	Vapor	
	10	Required Capacity			1473 kg/h		
	11	Molecular Mass			34		
	12	Oper. Pressure		Set Pressure	0.3 kgf/cm²-g	6.5 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	°C	73 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			1		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.21		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Blocked Outlet		
	29	Calculated Area			0.36 in²		
	30	Selected Area			0.5 in²		
	31	Orifice Designation			G		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			2039.3 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1.5 in	150#	
	36	Facing and Finish			STK/MAX1000AARH		
	37	Outlet: Size		Rating	3 in	150#	
	38	Facing and Finish			STK/MAX1000AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6053 | Rev.: 0

Tag Number : 1P39A-PSV -3433A01B

1. Sl. No. 13 Operating Temperature: 70-100 Deg C
2. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS304/SS304L) CERTIFIED.CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL BE ENSURED.
3. P&ID No. C050-79-41-1P39A-3401.01
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 130 Deg C & Design Pressure: 6.5/FV kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. SPECIAL SO FLANGE SHALL BE USED. REFER JOB SPECIFIC SKETCH.

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2 of 2	
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6053	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -3433B01A		
	2	Service			Purge Gas		
	3	Line No.		Eqp./Line Protected	3"-PV-1P39-65010-A61K-IS		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Purge Gas	Vapor	
	10	Required Capacity			1473 kg/h		
	11	Molecular Mass			34		
	12	Oper. Pressure		Set Pressure	0.3 kgf/cm²-g	6.5 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	°C	73 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			1		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.21		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Blocked Outlet		
	29	Calculated Area			0.36 in²		
	30	Selected Area			0.5 in²		
	31	Orifice Designation			G		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			2039.3 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1.5 in	150#	
	36	Facing and Finish			STK/MAX1000AARH		
	37	Outlet: Size		Rating	3 in	150#	
	38	Facing and Finish			STK/MAX1000AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6054 | Rev.: 0

Tag Number : 1P39A-PSV -3433B01A

1. Sl. No. 13 Operating Temperature: 70-100 Deg C
2. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS304/SS304L) CERTIFIED.CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL BE ENSURED.
3. P&ID No. C050-79-41-1P39A-3401.02
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 130 Deg C & Design Pressure: 6.5/FV kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. SPECIAL SO FLANGE SHALL BE USED. REFER JOB SPECIFIC SKETCH.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6054	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -3433B01B		
	2	Service			Purge Gas		
	3	Line No.		Eqp./Line Protected	3"-PV-1P39-65009-A61K-IS		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Purge Gas	Vapor	
	10	Required Capacity			1473 kg/h		
	11	Molecular Mass			34		
	12	Oper. Pressure		Set Pressure	0.3 kgf/cm²-g	6.5 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	°C	73 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			1		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.21		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Blocked Outlet		
	29	Calculated Area			0.36 in²		
	30	Selected Area			0.5 in²		
	31	Orifice Designation			G		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			2039.3 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1.5 in	150#	
	36	Facing and Finish			STK/MAX1000AARH		
	37	Outlet: Size		Rating	3 in	150#	
	38	Facing and Finish			STK/MAX1000AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6055 | Rev.: 0

Tag Number : 1P39A-PSV -3433B01B

1. Sl. No. 13 Operating Temperature: 70-100 Deg C
2. ALL MATERIAL IN THIS PIPING CLASS SHALL BE DUAL GRADE (SS304/SS304L) CERTIFIED.CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF BOTH GRADES SPECIFIED SHALL BE ENSURED.
3. P&ID No. C050-79-41-1P39A-3401.02
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 130 Deg C & Design Pressure: 6.5/FV kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.
7. SPECIAL SO FLANGE SHALL BE USED. REFER JOB SPECIFIC SKETCH.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6055	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -347301A		
	2	Service			Carrier Gas		
	3	Line No.	Eqp./Line Protected		8"-PV-1P39-65084-A1A-IS		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid	State		Carrier gas		Vapor
	10	Required Capacity			12640 kg/h		
	11	Molecular Mass			42		
	12	Oper. Pressure	Set Pressure		2.65 kgf/cm²-g	6.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature		80 °C	80	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable		1.7 kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			0.97		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.14		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Blocked Outlet		
	29	Calculated Area			2.85 in²		
	30	Selected Area			3.6 in²		
	31	Orifice Designation			M		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating		4 in		150#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size	Rating		6 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A216 Gr. WCB		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows			SS 316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6048 | Rev.: 0

Tag Number : 1P39A-PSV -347301A

1. P&ID No. C050-79-41-1P39A-3400.01
2. Sl. No. 27 Design Code shall be as per ASME / API 520
3. Design Temperature: 130 Deg C & Design Pressure: 6.5 kg/cm2g
4. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6048	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -347301B			
	2	Service		Carrier Gas			
	3	Line No.	Eqp./Line Protected	8"-PV-1P39-65083-A1A-IS			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Bellows			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Carrier Gas		Vapor	
	10	Required Capacity		12640	kg/h		
	11	Molecular Mass		42			
	12	Oper. Pressure	Set Pressure	2.65	kgf/cm²-g	6.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	80	°C	80	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor		0.97			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.14			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Blocked Outlet			
	29	Calculated Area		2.85	in²		
	30	Selected Area		3.6	in²		
	31	Orifice Designation		M			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		12647.89	kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating	4	in	150#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	6	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A216 Gr. WCB			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows		SS 316L			
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6049 | Rev.: 0

Tag Number : 1P39A-PSV -347301B

1. P&ID No. C050-79-41-1P39A-3400.01
2. Sl. No. 27 Design Code shall be as per ASME / API 520
3. Design Temperature: 130 Deg C & Design Pressure: 6.5 kg/cm2g
4. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6049	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -600001A		
	2	Service			Carrier Gas line to fuel gas header		
	3	Line No.		Eqp./Line Protected	4"-PV-1P39-16119-A1A-NI		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Carrier Gas	Vapor	
	10	Required Capacity			3492 kg/h		
	11	Molecular Mass			42		
	12	Oper. Pressure		Set Pressure	6.5 kgf/cm²-g	8 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	°C	52 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	1.7 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			0.9		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.2		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Control valve(1P39-PV-605703) Failure		
	29	Calculated Area			0.6 in²		
	30	Selected Area			0.79 in²		
	31	Orifice Designation			H		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			4597.59 kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1.5 in	150#	
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	3 in	150#	
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A105 (NORMALIZED)		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows			SS 316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6018 | Rev.: 0

Tag Number : 1P39A-PSV -600001A

1. Sl. No. 13 Operating Temperature: Ambient
2. P&ID No. C050-79-41-1P39A-1000.02
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6018	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -600001B		
	2	Service			Carrier Gas Line to Fuel Gas Header		
	3	Line No.		Eqp./Line Protected	4"-PV-1P39-16118-A1A-NI		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid		State	Carrier Gas		Vapor
	10	Required Capacity			3492	kg/h	
	11	Molecular Mass			42		
	12	Oper. Pressure		Set Pressure	6.5	kgf/cm²-g	8 kgf/cm²-g
	13	Oper. Temperature		RelievingTemperature		°C	52 °C
	14	Back Pressure		Constant		kgf/cm²-g	
	15			Variable	1.7	kgf/cm²-g	
	16			Total			
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			0.9		
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats			1.2		
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.				cP	
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area		°C	in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Control valve(1P39-PV-605703) Failure		
	29	Calculated Area			0.6	in²	
	30	Selected Area			0.79	in²	
	31	Orifice Designation			H		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			4597.59	kg/h	
	34						
CONNECTIONS	35	Inlet : Size		Rating	1.5	in	150#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	3	in	150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A105 (NORMALIZED)		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows			SS 316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6019 | Rev.: 0

Tag Number : 1P39A-PSV -600001B

1. Sl. No. 13 Operating Temperature: Ambient
2. P&ID No. C050-79-41-1P39A-1000.02
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6019	Rev.: 0

GENERAL	1	Tag Number		1P39A-PSV -600002A			
	2	Service		Recycle Gas			
	3	Line No.	Eqp./Line Protected	3"-PV-1P39-60078-A64I-IS			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Bellows			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Recycle Gas		Vapor	
	10	Required Capacity		2200	kg/h		
	11	Molecular Mass		42			
	12	Oper. Pressure	Set Pressure	3.25	kgf/cm²-g	6.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	80	°C	80	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor		0.93			
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats		1.14			
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Control valve(1P39-PCV-600001)Failure			
	29	Calculated Area		0.49	in²		
	30	Selected Area		0.5	in²		
	31	Orifice Designation		G			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity		2277.34	kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating	1.5	in	150#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	3	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 350 GR.LF2 CL.1			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		SS316			
	44	Bellows		SS316L			
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6050 | Rev.: 0

Tag Number : 1P39A-PSV -600002A

1. Sl. No. 12 Operating Pressure: 2.65-3.25 kg/cm2g
2. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
3. P&ID No. C050-79-41-1P39A-3400.01
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 130 Deg C & Design Pressure: 6.5 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6050	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -600002B		
	2	Service			Recycle Gas		
	3	Line No.	Eqp./Line Protected		3"-PV-1P39-60077-A64I-IS		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Bellows		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid	State		Recycle Gas		Vapor
	10	Required Capacity			2200 kg/h		
	11	Molecular Mass			42		
	12	Oper. Pressure	Set Pressure		3.25 kgf/cm²-g	6.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature		80 °C	80	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable		1.7 kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor			0.93		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.14		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Control valve(1P39-PCV-600001) failure		
	29	Calculated Area			0.49 in²		
	30	Selected Area			0.5 in²		
	31	Orifice Designation			G		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			2277.34 kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating		1.5 in		150#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size	Rating		3 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows			SS316L		
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6051 | Rev.: 0

Tag Number : 1P39A-PSV -600002B

1. Sl. No. 12 Operating Pressure: 2.65-3.25 kg/cm2g
2. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
3. P&ID No. C050-79-41-1P39A-3400.01
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 130 Deg C & Design Pressure: 6.5 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6051	Rev.: 0

GENERAL	1	Tag Number			1P39A-PSV -913101		
	2	Service			Steam		
	3	Line No.		Eqp./Line Protected	3"-LPS-1P39-91069-A2A-IS		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Open		
	8	Valve Discharge to			ATM		
PROCESS CONDITIONS	9	Fluid		State	Steam	Vapor	
	10	Required Capacity			282 kg/h		
	11	Molecular Mass			18.01		
	12	Oper. Pressure		Set Pressure	0.2 kgf/cm²-g	3.5 kgf/cm²-g	
	13	Oper. Temperature		RelievingTemperature	105 °C	174.8 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	0 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			21		
	18	Overpressure Factor					
	19	Compressibility Factor			0.93		
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats			1.4		
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Fire Case		
	29	Calculated Area			0.15 in²		
	30	Selected Area			0.196 in²		
	31	Orifice Designation			E		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	1 in	150#	
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size		Rating	2 in	150#	
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A105 (NORMALIZED)		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			Plain		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR		Yes	
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6056 | Rev.: 0

Tag Number : 1P39A-PSV -913101

1. This valve is in IBR service.Refer SIV.
2. P&ID No. C050-79-41-1P39A-9100.02
3. Sl. No. 27 Design Code shall be as per ASME / API 520
4. Design Temperature: 160 Deg C & Design Pressure: 3.5/FV kg/cm2g
5. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2 of 2	
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6056	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -110001			
	2	Service		PROPYLENE FEED			
	3	Line No.	Eqp./Line Protected	1"-PR-1P39-11002-D64I-NI			
	4	Nozzle (Full, Semi)		Full Nozzle Full Lift			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Closed			
	8	Valve Discharge to		Flare			
PROCESS CONDITIONS	9	Fluid	State	Propylene		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	39	kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	40	°C	65	°C
	14	Back Pressure	Constant		bar-g		
	15		Variable	1.7	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		25			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.07	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area		0.000004	in²		
	30	Selected Area		0.11	in²		
	31	Orifice Designation		D			
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	1	in	600#	
	36	Facing and Finish		RF, 125AARH			
	37	Outlet: Size	Rating	2	in	150#	
	38	Facing and Finish		RF, 125AARH			
MATERIALS	39	Body and Bonnet		ASTM A 350 GR.LF2 CL.1			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		SS316			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		No			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6000 | Rev.: 0

Tag Number : 1P39A-TSV -110001

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-1000.01
3. Sl.No. 10 Required Capacity: Nominal
4. Sl. No. 22 Density: 376.80 - 470 kg/m3
5. Sl. No. 27 Design Code shall be as per ASME / API 520
6. Design Temperature: -48/70 Deg C & Design Pressure: 69 kg/cm2g.
7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6000	Rev.: 0

GENERAL	1	Tag Number			1P39A-TSV -110002		
	2	Service			PROPYLENE DEINVENTORY LINE TO TANK FARM		
	3	Line No.	Eqp./Line Protected		1"-PR-1P39-11072-D64I-NI		
	4	Nozzle (Full, Semi)			Full Nozzle Full Lift		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Closed		
	8	Valve Discharge to			Flare		
PROCESS CONDITIONS	9	Fluid	State		Propylene		Liquid
	10	Required Capacity				kg/h	
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure		20 kgf/cm²-g	69	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature		40 °C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable		1.7 kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure			25		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization				kcal IT/kg	
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.				kg/m³	
	23	Viscosity @ Rel. Temp.			0.07 cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area			°C	in²
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			0.000004 in²		
	30	Selected Area			0.11 in²		
	31	Orifice Designation			D		
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating		1 in		600#
	36	Facing and Finish			RF, 125AARH		
	37	Outlet: Size	Rating		2 in		150#
	38	Facing and Finish			RF, 125AARH		
MATERIALS	39	Body and Bonnet			ASTM A 350 GR.LF2 CL.1		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			SS316		
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			No		
	47	Test Gag			Yes		
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6001 | Rev.: 0

Tag Number : 1P39A-TSV -110002

1. ALL CARBON STEEL SHALL SATISFY THE IMPACT (TOUGHNESS) REQUIREMENTS OF ASME B31.3 PARA 323.2.2 AS MINIMUM. VALUES SHALL BE AS PER ASME B31.3 TABLE 323.3.5 AND ASTM A 370. THE IMPACT TEST TEMPERATURE SHALL BE -48 DEG.C.
2. P&ID No. C050-79-41-1P39A-1000.02

3. Sl.No. 10 Required Capacity: Nominal

4. Sl. No. 22 Density: 376.80 - 470 kg/m3

5. Sl. No. 27 Design Code shall be as per ASME / API 520

6. Design Temperature: -48/70 Deg C & Design Pressure: 69 kg/cm2g

7. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6001	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -155701			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42004-B1A-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	22.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105 (NORMALIZED)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6002 | Rev.: 0

Tag Number : 1P39A-TSV -155701

1. P&ID No. C050-79-41-1P39A-1500.00
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 22.5 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6002	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -165701			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42009-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
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Notes:

No.	By	Date	Revision
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INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6004 | Rev.: 0

Tag Number : 1P39A-TSV -165701

1. P&ID No. C050-79-41-1P39A-1600.02
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6004	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -165801			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42007-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.),			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
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Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6003 | Rev.: 0

Tag Number : 1P39A-TSV -165801

1. P&ID No. C050-79-41-1P39A-1600.01
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6003	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -315601			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42053-B1A-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	40	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105 (NORMALIZED)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
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Notes:

No.	By	Date	Revision
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INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6009 | Rev.: 0

Tag Number : 1P39A-TSV -315601

1. P&ID No. C050-79-41-1P39A-3103.01
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 40 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6009	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -420005			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42012-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
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Notes:

No.	By	Date	Revision
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INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6005 | Rev.: 0

Tag Number : 1P39A-TSV -420005

1. P&ID No. C050-79-41-1P39A-1700.02
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6005	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -420006			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42014-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
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Notes:

No.	By	Date	Revision
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INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6006 | Rev.: 0

Tag Number : 1P39A-TSV -420006

1. P&ID No. C050-79-41-1P39A-3000.00
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2 of 2	
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6006	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -420007			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42016-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		bar-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6007 | Rev.: 0

Tag Number : 1P39A-TSV -420007

1. P&ID No. C050-79-41-1P39A-3001.00
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6007	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -420008			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42018-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity			kg/h		
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6008 | Rev.: 0

Tag Number : 1P39A-TSV -420008

1. P&ID No. C050-79-41-1P39A-3001.00
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6008	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -420009			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42056-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
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Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6010 | Rev.: 0

Tag Number : 1P39A-TSV -420009

1. P&ID No. C050-79-41-1P39A-3401.01
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6010	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -420010			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42066-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		bar-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6011 | Rev.: 0

Tag Number : 1P39A-TSV -420010

1. P&ID No. C050-79-41-1P39A-3401.02
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6011	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -420013			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42072-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
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Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6016 | Rev.: 0

Tag Number : 1P39A-TSV -420013

1. P&ID No. C050-79-41-1P39A-7000.01
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6016	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -605602			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42059-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

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Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6012 | Rev.: 0

Tag Number : 1P39A-TSV -605602

1. P&ID No. C050-79-41-1P39A-6000.01
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6012	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -605701			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42804-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	24.5	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6014 | Rev.: 0

Tag Number : 1P39A-TSV -605701

1. P&ID No. C050-79-41-1P39A-6000.02
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 24.5 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6014	Rev.: 0

GENERAL	1	Tag Number			1P39A-TSV -665601		
	2	Service			Cooling Water		
	3	Line No.		Eqp./Line Protected	3/4"-CWR-1P39-42068-A3AL-NI		
	4	Nozzle (Full, Semi)			Modified Nozzle		
	5	Design	Safety, Relief, Safety-Relief		Pressure Relief without Rupture Disc		
	6	Type	Conventional, Bellow, Pilot Operated		Conventional		
	7	Bonnet Type			Open		
	8	Valve Discharge to			ATM		
PROCESS CONDITIONS	9	Fluid		State	Cooling Water	Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure		Set Pressure	4.5 kgf/cm²-g	8	
	13	Oper. Temperature		RelievingTemperature	45 °C	65 °C	
	14	Back Pressure		Constant	kgf/cm²-g		
	15			Variable	0 kgf/cm²-g		
	16			Total			
	17	% Allowable Overpressure			10		
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.			0.44 cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure		Blowdown %			
	26	Vessel Wall Temp.		Vessel Surface Area	°C	in²	
BASIS AND SELECTION	27	Design Code			ASME		
	28	Sizing Basis			Liquid Thermal Relief		
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)		1		
	33	Total Capacity			kg/h		
	34						
CONNECTIONS	35	Inlet : Size		Rating	0.75 in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size		Rating	1 in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet			ASTM A105-N (GALV.)		
	40	Nozzle and Disc			SS316		
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring			CS with weather protective coating		
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted			Screwed		
	46	Lever: Plain or Packed			Plain		
	47	Test Gag			Yes		
TESTS	48	NACE		IBR			
	49	Hydrogen		Radiography			
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number			C050-1P39A-YR-MR-1360		
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6015 | Rev.: 0

Tag Number : 1P39A-TSV -665601

1. P&ID No. C050-79-41-1P39A-6600.00
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6015	Rev.: 0

GENERAL	1	Tag Number		1P39A-TSV -915601			
	2	Service		Cooling Water			
	3	Line No.	Eqp./Line Protected	3/4"-CWR-1P39-42072-A3AL-NI			
	4	Nozzle (Full, Semi)		Modified Nozzle			
	5	Design	Safety, Relief, Safety-Relief	Pressure Relief without Rupture Disc			
	6	Type	Conventional, Bellow, Pilot Operated	Conventional			
	7	Bonnet Type		Open			
	8	Valve Discharge to		ATM			
PROCESS CONDITIONS	9	Fluid	State	Cooling Water		Liquid	
	10	Required Capacity			kg/h		
	11	Molecular Mass					
	12	Oper. Pressure	Set Pressure	4.5	kgf/cm²-g	8	kgf/cm²-g
	13	Oper. Temperature	RelievingTemperature	45	°C	65	°C
	14	Back Pressure	Constant		kgf/cm²-g		
	15		Variable	0	kgf/cm²-g		
	16		Total				
	17	% Allowable Overpressure		10			
	18	Overpressure Factor					
	19	Compressibility Factor					
	20	Latent Heat of Vaporization			kcal IT/kg		
	21	Ratio of Specific Heats					
	22	Relative Density @ Rel. Temp.			kg/m³		
	23	Viscosity @ Rel. Temp.		0.44	cP		
	24	Barometric Pressure					
	25	Cold Bench Test Pressure	Blowdown %				
	26	Vessel Wall Temp.	Vessel Surface Area		°C		in²
BASIS AND SELECTION	27	Design Code		ASME			
	28	Sizing Basis		Liquid Thermal Relief			
	29	Calculated Area			in²		
	30	Selected Area			in²		
	31	Orifice Designation					
	32	Number of Valves	(To Meet Capacity)	1			
	33	Total Capacity				kg/h	
	34						
CONNECTIONS	35	Inlet : Size	Rating	0.75	in	NPT(F)	
	36	Facing and Finish					
	37	Outlet: Size	Rating	1	in	NPT(M)	
	38	Facing and Finish					
MATERIALS	39	Body and Bonnet		ASTM A105-N (GALV.)			
	40	Nozzle and Disc		SS316			
	41	Resilient Seat Seal					
	42	Guide and Rings					
	43	Spring		CS with weather protective coating			
	44	Bellows					
OPTIONS	45	Cap: Screwed or Bolted		Screwed			
	46	Lever: Plain or Packed		Plain			
	47	Test Gag		Yes			
TESTS	48	NACE	IBR				
	49	Hydrogen	Radiography				
PURCHASE	50	Manufacturer					
	51	Model					
	52	Purchase Order Number					
	53	Requisition number		C050-1P39A-YR-MR-1360			
	54						

Notes:

No.	By	Date	Revision
0	PKS	19-02-2026	ISSUED FOR MR

INSTRUMENT SPECIFICATION
Pressure Relief Valve
Project : NRL_NREP
Job No : C050
Unit No : PPU

Sheet 1 of 2

Code: 1501 | Doc. No.: C050-1P39A-YR-DS-6017 | Rev.: 0

Tag Number : 1P39A-TSV -915601

1. P&ID No. C050-79-41-1P39A-9100.02
2. Sl.No. 10 Required Capacity: Nominal
3. Sl. No. 22 Density: 980 kg/m3
4. Sl. No. 27 Design Code shall be as per ASME / API 520
5. Design Temperature: 65 Deg C & Design Pressure: 8 kg/cm2g
6. NDT REQUIREMENTS AS PER EIL JOB SPECIFICATION C050-6-44-0016.

				INSTRUMENT SPECIFICATION		
				Pressure Relief Valve		
0	PKS	19-02-2026	ISSUED FOR MR		Sheet 2	of 2
No.	By	Date	Revision	Code: 1501	Dwg. No.: C050-1P39A-YR-DS-6017	Rev.: 0

प्रैशर रिलीफ वॉल्वों के लिए मानक विनिर्देश

STANDARD SPECIFICATION FOR PRESSURE RELIEF VALVES

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
					Approved by	
5	06.09.21	Revised and Reissued as Standard Specification	ASG/MK	NK	MN	SM
4	25.07.16	Revised and Reissued as Standard Specification	MK	SB	RG	RN
3	29.11.10	Revised and Reissued as Standard Specification	RK	RG	TGM/JMS	ND
2	02.05.05	Revised and Reissued as Standard Specification	RP	HCJ	PM	VJN
1	15.09.97	Revised and Reissued as Standard Specification	RK	BRS	RB	AS

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Abbreviations:

AARH	:	Arithmetic Average Roughness Height
NPT	:	National Pipe Thread

Instrumentation Standards Committee

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Members :
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1.0 GENERAL

1.1 Scope

1.1.1 This specification, together with the data sheets describes the requirements for the design, materials, fabrication, documentation, nameplate marking, inspection, testing and shipment of pressure relief valves.

1.1.2 The related standards referred herein and mentioned below shall be of the latest edition of the following codes, standard practices and publications, unless otherwise specified-

ANSI/NACE	American National Standard Institute/ National Association for Corrosion Engineers	
	MR0175/ ISO-15156	Petroleum and natural gas industries-Materials for use in H2S-containing environments in oil and gas production
API	American Petroleum Institute	
	520	Sizing, Selection and Installation of Pressure Relieving Devices in Refineries. Part I Sizing & Selection Part II Installation
	521	Guide for Pressure Relieving and Depressurising Systems.
	526	Flanged Steel Pressure Relief Valves.
	527	Seat Tightness of Pressure Relief Valves.
ASME	American Society of Mechanical Engineers.	
	B 1.20.1	Pipe Threads General Purpose (Inch).
	B 16.5	Pipe Flanges and Flanged Fittings
	B 16.20	Metallic Gaskets for Pipe Flanges
	B 16.34	Valves- Flanged, Threaded and Welding End
	Sec-VIII	Boiler and Pressure Vessels Code Section VIII 'Pressure Vessels'
	Sec-XIII	Boiler and Pressure Vessels Code Section XIII 'Overpressure Protection'
	Sec-I	Boiler and Pressure Vessels Code. Section-I 'Power Boilers'
EN	European Standards	
	10204	Inspection Documents For Metallic Products.
IBR	Indian Boiler Regulations	

1.1.3 In the event of any conflict between this specification, data sheets, related standards and codes, the following order of priority shall govern:

a) Statutory Regulations

b) Data Sheets

f) Standard Specification

g) Codes and Standards

1.1.4 In addition to compliance to purchaser's specifications in totality, vendor's extent of responsibility shall include the following;

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a) Purchaser's data sheets indicate the type, size, relieving area etc. of the selected valve. However, vendor shall be responsible to size and select the proper valve with orifice relieving area meeting the indicated operating conditions.

b) Purchaser's data sheets specify the acceptable materials for body, bonnet, disc, nozzle, spring, bellows etc. Alternate superior material of construction shall also be acceptable provided vendor assumes complete responsibility for the selected materials for their compatibility with the specified fluid and its operating conditions.

1.2 Bids

1.2.1 Vendor's quotation shall be strictly as per the bidding instructions to vendor attached with the Material Requisition.

1.2.2 Vendor's quotation shall include the following:

a) Detailed specification sheet for each item which shall provide information regarding type, construction materials, sizing code, inlet and outlet type, size and rating, relieving area, relieving capacity, orifice letter designation, overpressure, blow down, operating pressure etc. and any other valve accessories. The material specifications and units of measurement for various items in vendor's specification sheets shall be to the same standards as those indicated in purchaser's data sheets.

b) ASME certificate for discharge co-efficient or ASME certified capacity curves to be submitted along with offer.

c) Proven references in line with clause 1.2.3 of this specification whenever specifically indicated in purchaser's specifications.

d) Deviations on technical requirements shall not be entertained. In case vendor has any valid technical reason to deviate, they must include a list of deviations tag number wise, summing up all the deviations from the purchaser's data sheets and other technical specification along with the technical reasons for each of these deviations.

e) Catalogues giving detailed technical specifications (i.e. available sizes, ratings, sizing codes, approvals & certifications, MOC, etc), model decoding details and other related information for each type of pressure relief valve covered in the bid. In case catalogues do not provide all such technical details, vendor shall submit supplementary technical literature.

f) Two years' operational spares for each pressure relief valve and its accessories which shall include nozzle, disc insert, guide, pilot etc. as a minimum.

g) Any special tools and tackles needed for maintenance work. In case no special tools are necessary for the offered pressure relief valve, vendor must certify in their offer.

1.2.3 All items, as offered, shall be field proven and should have completed trouble free satisfactory operation for a period of minimum six months on the bid due date in the similar application with process conditions similar to those as specified in the purchaser's data sheet. Items with proto-type design or items not meeting provenness criteria specified above shall not be offered.

1.2.4 All documentation submitted by the vendor including their quotation, catalogues, drawings, installation, operation and maintenance manuals etc. shall be in English language only.

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1.3 Drawings and Data

1.3.1 Detailed drawings, data, catalogues and manuals required shall be submitted by the vendor as per vendor data requirements attached with the requisition.

1.3.2 Final documentation consisting of design data, installation manual, operation and maintenance manual etc. shall be submitted by vendor after placement of purchase order which shall include the following as a minimum:

a) Specification sheet for each pressure relief valve and its accessories

b) Certified drawings and technical catalogues for each pressure relief valve and accessories, which shall provide dimensional details, internal construction details, end connection details, weight, materials of construction, sizing codes, approvals & certifications.

c) Copy of type test certificates.

d) Copy of test certificates for all the tests indicated in clause 4.0 of this specification.

e) Installation procedure for Pressure relief valve and its accessories.

f) Calibration and maintenance procedure including replacement of internals wherever applicable.

2.0 DESIGN AND CONSTRUCTION

2.1 Valve Design

2.1.1 The definitions of various terminologies used in purchaser's data sheets are as per API RP 520 part I.

2.1.2 Unless specified otherwise, all pressure relief valves shall be full nozzle full lift type and all relief valves in thermal safety application shall be modified nozzle or full nozzle type.

2.1.3 For flanged pressure relief valves, the valve inlet and outlet size, rating, the orifice designation and corresponding relieving area shall be as per API 526.

2.1.4 The design of pressure relief valves in steam service under IBR design code shall be governed by Regulation 294 and regulation 295 of IBR. However where design code is specifically indicated as ASME Section I, the valve design shall meet the pressure relief valve requirements specified in ASME Section I.

2.2 Valve Sizing

2.2.1 Sizing shall be carried out using the formulae mentioned in the following standards whenever the sizing code mentioned in the purchaser's data sheets refers to these;

Sizing Code	Standard
API	API RP 520 Part I
	API RP 521
ASME	Boiler and Pressure vessels code Section VIII 'Pressure Vessels'.
	Boiler and Pressure Vessels Code Section XIII 'Overpressure Protection'
	Boiler and Pressure vessels code Section-I - 'Power Boilers'

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IBR Indian Boiler Regulations, paragraph – 293

2.2.2 Discharge Co-efficient

Following discharge coefficient values shall be used for sizing of pressure relief valves;

a) For all valves with design code as ASME Sec VIII, discharge co-efficient (Kd) of 0.975 in gas or vapour service and 0.65 in liquid service shall be used as per API 520. Additionally, clause 2.2.4 shall be complied for final selection using the ASME certified discharge co-efficient.

b) For all valves in steam service covered under IBR design code, discharge co-efficient shall either be selected as per Regulation 293 or as tested and certified by IBR as per Appendix 'L' of IBR. For all valves in steam service with design code as ASME Section-I, certified discharge co-efficient / certified discharge capacity as per ASME section-I shall be used.

2.2.3 For the selected orifice letter designation and inlet and outlet size of the pressure relief valve, relieving area of the valve offered by vendor shall meet those in API-526.

2.2.4 For valves having ASME certified discharge coefficient / capacity curves and sizing code mentioned in purchaser's datasheet as API, vendor shall select the valve as per API-526 standard orifice area and designation by considering the following effective area :-
Effective area = ASME calculated area x (ASME Kd /API Kd)
In any case, the orifice designation of the selected valve shall not be lower than the orifice designation specified in purchaser's datasheet.
In case non API valves are specified as per purchaser's datasheets, vendor shall select non-API valves that have discharge coefficient / capacity curves certified as per ASME. For these non-API valves also, the effective area for valve selection shall be determined with the same methodology as stated above for API valves.

2.2.5 For pressure relief valve covered under ASME Sec-I design code, the valve design shall conform to ASME Section I requirements with selected area higher of the area calculated as per ASME Section I requirements and that calculated as per regulation 293 of IBR.

2.3 Valve Construction

2.3.1 Body

2.3.1.1 Body rating shall be as per API-526 / ASME B16.34.

2.3.1.2 Unless otherwise mentioned, end connection details shall be as below:

a) Threaded end connections shall be to NPT as per ASME B 1.20.1.

b) Flanged end connections shall be as per ASME B 16.5.

c) Flanged face finish shall be as per ASME B 16.5.The face finish as specified in the data sheets, shall be as follows;

125 AARH : 125 to 250 microinchAARH

63 AARH : 32 to 63 microinchAARH

2.3.1.2 For flanged valves, inlet and outlet sizes and ratings and centre to flange face dimensions shall be in accordance with API-526 / ASME B 16.34 (as applicable). Dimensional tolerance shall be as mentioned therein.

2.3.1.3 Pressure relief valves shall be self-draining type or shall have body drain plugs.

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2.3.1.4 For the pilot operated pressure relief valves, where vendor's standard model provides only semi nozzle design (i.e. the body is part of the inlet flow path), body material and nozzle material shall be same and as specified in purchaser's data sheets, as a minimum.

2.3.2 **Trim**

2.3.2.1 The term 'trim' covers all the parts of the valves exposed to and in contact with the process fluid except for the body and bonnet assembly i.e. nozzle, disc, disc holder, stem etc. In case cast nozzle is offered, the nozzle shall be radiographically tested irrespective of the pressure relief valve rating.

2.3.2.2 Valves shall be of the full nozzle type of design with the exception as per clause 2.3.1.4 and valves in thermal relief application as per clause no 2.1.2.

2.3.2.3 Wherever stelliting of disc and nozzle has been specified, it stands for stelliting of the seat joint and the entire disc contour, unless otherwise mentioned.

2.3.2.4 For high temperature application, the materials for the internals shall be selected to avoid galling.

2.3.2.5 Pressure relief valves in steam drum/boiler application with design as per ASME Section I, shall have two adjustable rings to adjust valve over-pressure and blow down.

2.3.2.6 Resilient seat, seals or o-rings wherever used shall be suitable for pressure and temperature conditions specified.

2.3.2.7 Gaskets wherever used shall be metallic type. Gaskets with asbestos filler or with asbestos bearing material shall not be used.

2.3.2.8 Selection of material of construction for guide and rings compatible with specified nozzle & disc material and meeting process and design conditions is the vendor's responsibility.

2.3.3 **Bonnet and Spring**

2.3.3.1 All valves shall be provided with a cap over the adjusting bolt. Cap shall be of either bolted type or screwed type.

2.3.3.2 Lifting lever shall be provided for temperature exceeding 60°C whenever the fluid to be relieved is steam, air or water.

2.3.3.3 Valve spring shall be selected such that the set pressure falls in the adjustable range of the spring.

2.3.3.4 Carbon steel springs shall be made corrosion resistant through plating/coating as per manufacturer's standard design or as specified in the purchaser's data sheets.

2.3.3.5 The allowable tolerance in set pressures is as below:

a) ±0.14 kg/cm² g for set pressure upto and including 5kg/cm² g.

b) ±3% for set pressure above 5kg/cm² g.

2.3.3.6 Bonnet shall be of the closed type for all process applications in general. For valves discharging to atmosphere, open type bonnet can be used only for steam, non-hazardous/ non-toxic and non-hydrocarbon fluids. Closed bonnet can be used in place of open bonnet in case

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the pressure relief valve is suitable for design conditions. For all steam applications under design code IBR or ASME Section I with open bonnet design, weather protection cover shall be provided.

2.3.4 **Pilot Design**

2.3.4.1 For pilot operated valves, the pilot design shall be of inherently fail safe.

2.3.4.2 Unless specified otherwise, pilot shall be non-flowing type.

2.3.4.3 All accessories like back flow preventer, pilot filter etc. required for proper operation of pilot operated valves as per indicated service conditions shall be included.

2.3.4.4 Material of construction of pilot shall be same as that of main valve nozzle as a minimum.

2.3.4.5 The o-ring and diaphragm material of pilot shall be suitable for the pressure and temperature conditions specified in the data sheet.

2.3.5 **Minimum acceptable materials**

2.3.5.1 Minimum acceptable materials of construction to be considered by vendor for valve components are already specified in datasheets.

However, alternate superior materials may be provided if they meet all process conditions (operating, design, fluid properties, corrosion, etc), testing (ASME, API, radiography, etc) and statutory requirements (ASME, API, IBR, NACE, etc) specified by purchaser. Accordingly, the following alternate materials can be accepted:

a) Body & bonnet: ASTM A 105, ASTM A 216 gr. WCB / WCC in place of carbon steel.

b) Nozzle & disc: SS 316L in place of SS 316.

c) Spring: Inconel, chrome alloy steel and 17-4 PH in place of carbon steel. High temperature alloy steel in place of tungsten alloy steel.

d) Bellows: Inconel in place of SS 316L.

e) For NACE service, following minimum material shall be provided:-

i) For conventional type pressure relief valves, spring material shall be inconel with nozzle and disc material as SS 316L.

ii) For bellows type pressure relief valves, bellows material shall be inconel with spring/nozzle/disc material as SS 316L.

iii) For pilot operated relief valves, the pilot valve spring (and main valve retaining spring, if applicable) shall be of inconel with nozzle and disc material as SS 316L.

2.4 All pressure relief valves in oxygen and chlorine service shall be thoroughly degreased using reagents like trichloro-ethylene or carbon tetrachloride. End connections shall be blinded / plugged after this degreasing process to avoid images of oil particles.

3.0 NAMEPLATE

3.1 Each pressure relief valve shall have a stainless steel nameplate attached firmly to it at a visible place, furnishing the following information: -

a) Tag number as per purchaser's data sheet.

b) Manufacturer's serial number and/or model number.

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c) Manufacturer's name/trade mark.

d) Nominal flange size in inches and rating in pounds for both inlet and outlet.

e) Orifice letter designation.

f) Valve set pressure.

g) Cold bench test set pressure.

3.2 For the above, pressures shall be marked in the same units as those followed in purchaser's data sheets.

4.0 INSPECTION AND TESTING

Purchaser reserves the right to inspect and witness testing at vendor's works as per Inspection Test Plan. All these tests shall be completed by the vendor and test reports shall be submitted to Purchaser for scrutiny.

5.0 SHIPPING

5.1 Valves shall be supplied as a whole, complete with all the accessories like cap, lifting lever, test gag etc.

5.2 All threaded and flanged openings shall be suitably protected to prevent entry of foreign material.

5.3 All pressure relief valves in oxygen and chlorine service shall be separately packed along with a certificate indicating 'CERTIFIED FOR OXYGEN/CHLORINE SERVICE', as applicable.

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प्रैशर रिलीफ वाल्वों के लिए निरीक्षण व परीक्षण योजना

INSPECTION AND TEST PLAN FOR PRESSURE RELIEF VALVES

Rev. No.	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
					Approved by	
4	21.05.20	Revised and Re-issued	NP	RS	RKS	SKS
3	09.01.14	Revised and Re-issued	MJ	RS	SCG	SC
2	22.03.12	Revised and Re-issued	MJ	GS	AKC	DM
1	02.01.08	Revised and Re-issued	SA	CRM	MVKK	VC
0	09.12.02	Issued for implementation	RG	AKC	AKB	GRR

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Abbreviations

API	:	American Petroleum Institute	NDT	:	Non Destructive Testing
AS	:	Alloy Steel	No.	:	Number
ASME	:	American Society of Mechanical Engineers	PMI	:	Positive Material Identification
CBSP	:	Cold Bench Test Set Pressure	PO	:	Purchase Order
CEIL	:	Certification Engineers International Limited	PQR	:	Procedure Qualification Record
DP/DPT	:	Dye Penetrant Testing	PR	:	Purchase Requisition
EPC	:	Engineering Procurement Construction	PWHT	:	Post Weld Heat Treatment
IC	:	Inspection Certification	QC	:	Quality Control
IRN	:	Inspection Release Note	RT	:	Radiography Test
ITP	:	Inspection and Test Plan	SS	:	Stainless Steel
Lab.	:	Third Party Laboratory	TC	:	Test Certificate
LPT	:	Liquid Penetrant Testing	TPI or TPIA	:	Third Party Inspection Agency
Mfr	:	Manufacturer	VDR	:	Vendor Data Requirement
MTC	:	Material Test Certificates	WPS	:	Welding Procedure Specification
MOC	:	Material of Construction	WPQ	:	Welders Performance Qualification

Inspection Standards Committee

Convenor : Mr. R.K. Singh

Members :

Mr. Rajesh Sinha	Mr. Himangshu Pal	Mr. Chandrashekhar
Mr. R. Muthuramalingam	Mr. Avdhesh Agrawal	Mr. Mahendra Mittal
Mr. Arupjyoti Saikia(Engg.)		

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1.0 SCOPE

This Inspection and Test Plan covers the minimum inspection and testing requirements for Pressure Relief Valves.

2.0 REFERENCE DOCUMENTS

PO/PR / Standards referred there in /Job specifications / Approved documents.

3.0 INSPECTION AND TEST REQUIREMENTS

SL NO.	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
1.0	**Procedures**	--	--	--	--	--	--
2.0	**Material Inspection**						
2.1	Incoming Material Like: Castings for Body/Bonnet/ Cast Nozzle, Forgings for Inlet Nozzle/Disk/Seat Pallet etc.	• Mechanical & Chemical properties • Heat treatment, hardness as applicable	100%	MTC / Lab. TC	H	H	R
2.2	Bought out items: Spring/Bellow/Fasteners, Gaskets/Diaphragm/Pilot etc	• Test requirement as applicable for each Components.	100%	Mfr's TC	H	R	R

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SL NO.	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
3.0	**In process Inspection**						
3.1	Machining of components , Assembly & Testing.	• Visual, Dimensions.	100%	Supplier's Test Records	-	H	R
		• Hydrostatic test on Body & Inlet Nozzles before assembling.	100%	Supplier's Test Records	-	H	RW (Note-4)
3.2	NDT , PWHT (As specified)	• RT of Castings as applicable • RT on Cast Nozzle	100%	NDT reports	-	H	R
4.0	**Final Inspection**						
4.1	Final Inspection	• Visual check . • Dimensional check • Cold Bench Test Set Pressure(CBSP). • Seat Leakage Test • Back Pressure Test & External Joint Leakage Test	100%	Supplier's Test Records and Inspection Witness Record	-	H	RW
4.2	Submission of certificates / Documents	• Capacity Test as per ASME • Blow Down • Valve Lift test • Valve reclosing pressure test	Prototype for each model	Type Test Certificates	-	H	R
5.0	**Painting**						
5.1	Painting	• Special cleaning and packing for oxygen and chlorine services • Pre treatment, primer and final paint, shade, thickness.	100%	Packing list / Supplier's Records	-	H	-

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SL NO.	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
6.0	**Documentation**						
6.1	Documentation and IC/IRN	• Review of Internal Test Reports &MTC • Bought out items/accessories TC • Issuance of IC/IRN.	100%	Supplier's Test Records / IC/IRN	-	H	H
6.2	Final Document submission	Compilation of Inspection reports ,drawings, etc as per VDR / PR	100%	Final data folder /Completeness certificate	-	H	H

Legends: H- Hold (Do not proceed without approval), R-Review of Documents, RW-Random witness(Random 10%, minimum 1 No. of type), W- Witness (Give due notice, work may proceed after scheduled date).

NOTES :

1. This document describes the generic test requirements. Any additional test or inspection scope if specified in contract documents shall also be applicable. (Unless otherwise agreed upon).
2. Acceptance Norms for all the activities shall be as per PO/PR/ Standards referred there in/ Job specifications /Approved documents .
3. For EPC Jobs, Scope of Inspection shall be under TPIA only, unless specified otherwise.
4. Supplier to carry out this stage Inspection on all items and EIL/TPIA to decide on Witness of this Stage Inspection.

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SPECIFICATION FOR QUALITY MANAGEMENT SYSTEM REQUIREMENTS FROM BIDDERS / SUPPLIERS / CONTRACTORS

Rev. No.	Date	Purpose	Prepared by	Checked by	Approved by: Standards Committee Convener	Approved by: Standards Bureau Chairman
3	29-09-2025	General Revision	QMS Standards Committee	QMS Standards Committee	AK	MN
2	12-06-2020	General Revision	QMS Standards Committee	QMS Standards Committee	SKB	SKS
1	12-03-2015	General Revision	QMS Standards Committee	QMS Standards Committee	MPJ	SC
0	04-06-2009	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND

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Abbreviations:

EIL	Engineers India Limited
ISO	International Organization for Standardization
MR	Material Requisition
PO	Purchase Order
PR	Purchase Requisition
QMS	Quality Management System

QMS Standards Committee

Convener: Mr. Anil Kumar

Members: Mr. Himangshu Pal (SCM-Inspection)
Mr. Ravindra Kumar (Const.)
Mr. Vinod Kumar (CQA)
Mr. Swapnil Vaishnav (Projects)
Mr.Vijay Kumar Garg (SCM)
Mr.Raju Kumar Pandey (Equipment Division)

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1.0 SCOPE

This specification establishes the Quality Management System requirements to be met by BIDDER for following purpose:

- QMS requirements to be met by suppliers/contractors after award of work/duringcontract execution.

2.0 DEFINITIONS

2.1 Bidder

For the purpose of this specification, the word "BIDDER" means the person(s), firm, company or organization who is under the process of being contracted by EIL / Owner for delivery of some products (including service).The word "Bidder" is considered synonymous to supplier, contractor or vendor.

2.2 Project Quality Plan (PQP)

Document tailored from Standard Quality Management System Manual of BIDDER, specifying how the quality requirements of the project will be met.

2.3 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

- Specification for Documentation Requirements from Contractors (Doc. No. 6-78-0002)
- Specification for Documentation Requirements from Suppliers (Doc. No. 6-78-0003)

4.0 QUALITY MANAGEMENT SYSTEM – GENERAL

Unless otherwise agreed with EIL / Owner, the BIDDER proposed quality system shall fully satisfy all relevant requirements of ISO 9001 "Quality Management Systems – Requirements."Evidence of compliance shall be current certificate of quality system registration to ISO 9001 or a recent compliance audit recommending registration from a certification agency.The quality system shall provide the planned and systematic control of all quality related activities for execution of contract.Implementation of the system shall be in accordance with BIDDER'S Quality Manual and PROJECT specific Quality Plan.

5.0 QUALITY SYSTEM REQUIREMENTS

5.1 BIDDER shall prepare and submit for review / record, Project Quality Plan / Quality Assurance Plan for contracted scope / job.The BIDDER'S Quality Plan shall address all of the applicable elements of ISO 9001, identify responsible parties within BIDDER'S organization, for the implementation / control of each area, reference the applicable procedures used to control / assure each area, and verify the documents produced for each area.The Project Quality Plan shall necessarily define control or make reference to the relevant procedures, for design and engineering, purchase, documentation, record control, bid evaluation, inspection, production/manufacturing, preservation, packaging and storage, quality control at construction site, pre-commissioning, commissioning and handing over (as applicable) in line with contract requirement and scope of work.

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5.2 BIDDER shall identify all specified or implied statutory and regulatory requirements and communicate the same to all concerned in his organization and his sub contractor's organization for compliance.

5.3 BIDDER shall deploy competent and trained personnel for various activities for fulfilment of PO / contract.BIDDER shall arrange adequate infrastructure and work environment to ensure that the specification and quality of the deliverable are maintained.

5.4 BIDDER shall do the quality planning for all activities involved in delivery of order.The quality planning shall cover as minimum the following:

- Resources
- Product / deliverable characteristics to be controlled.
- Process characteristics to ensure the identified product characteristics are realized
- Identification of any measurement requirements, acceptance criteria
- Records to be generated
- Need for any documented procedure

The quality planning shall result into the quality assurance plan, inspection and test plans (ITPs) and job procedures for the project activities in the scope of bidder. These documents shall be submitted to EIL/Owner for review/approval, before commencement of work.

5.5 Requirements for sub-ordering of outsourced items /sub-contracting / purchasing of services specified in MR/ contract / tender shall be adhered to. In general all outsourced items will be from approved vendors of EIL. Wherever requirements are not specified, or approved sub vendors do not exist, the sub-contractor shall establish and maintain a system for purchasing / sub-contracting to ensure that purchased product / service conforms to specified requirements in concurrence with EIL / Owner.Criteria for selection of sub-contractor, evaluation, re-evaluation, maintenance of purchasing data and verification of purchased product (sub-contractor services), constitute important components of this requirement.

5.6 BIDDER shall plan and carry production and service provision under controlled conditions.Controlled conditions shall include, as applicable

a) the availability of information that describes the characteristics of the product
b) the availability of work instructions
c) the use of suitable equipment
d) the availability and use of monitoring and measuring devices
e) the implementation of monitoring and measurement
f) the implementation of release, delivery and post-delivery activities

5.7 BIDDER shall validate any processes for production and service provision where resulting output cannot be verified by subsequent monitoring and measurement. This includes any process where deficiencies become apparent only after the product is in use or service has been delivered.

5.8 BIDDER shall establish a system for identification and traceability of product / deliverable throughout product realization.Product status with respect to inspection and testing requirements shall be identified.

5.9 BIDDER shall identify, verify, protect and safeguard EIL / Owner property (material / document) provided for use or incorporation into the product.If any Owner / EIL property is lost, damaged or otherwise found to be unsuitable for use, this shall be reported to the EIL / Owner.

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BIDDER shall ensure the conformity of product / deliverable during internal processing and delivery to the intended destination.Requirements mentioned in the MR/ tender shall be adhered to.

5.10 BIDDER shall establish system to ensure that inspection and testing activities are carried out in line with requirements.Where necessary, measuring equipment shall be calibrated at specified frequency, against national or international measurement standards; where no such standard exists, the basis used for calibration shall be recorded.The measuring equipment shall be protected from damage during handling, maintenance and storage.

5.11 BIDDER shall ensure effective monitoring, using suitable methods, of the processes involved in production and other related processes for delivery of the scope of contract.

5.12 BIDDER shall monitor and measure the characteristics of the product/deliverable to verify that product requirement has been met.The inspection (stage as well as final) by BIDDER and EIL / Owner personnel shall be carried out strictly as per the approved ITPs or ITPs forming part of the contract.Product release or service delivery shall not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by relevant authority and where applicable by Owner / EIL.

5.13 BIDDER shall establish and maintain a documented procedure to ensure that the product which does not conform to requirements is identified and controlled to prevent its unintended use or delivery

5.14 All non-conformities (NCs) / deficiencies found by the BIDDER'S inspection / surveillance staff shall be duly recorded, including their disposal action shall be recorded and resolved suitably.Effective corrective actions shall be implemented by the BIDDER so that similar NCs including deficiencies do not recur.The BIDDER shall take appropriate actions to address the Risks and Opportunities in the project.

5.15 All deficiencies noticed and reported by EIL / Owner shall be analysed by the BIDDER and appropriate corrective actions shall be implemented.BIDDER shall intimate EIL / Owner of all such corrective action implemented by him.

5.16 BIDDER should follow the standards, specifications and approved drawings. Concessions/Deviations shall be allowed only in case of unavoidable circumstances. In such situations Concession/deviation request must be made by the BIDDER through online system of EIL vendor portal for document exchange. URL of EIL vendor portal for document exchange is http://edocx.eil.co.in/vportal. BIDDER shall have documented procedure for control of documents.

5.17 All project records shall be carefully kept, maintained and protected for any damage or loss until the project completion, then handed over to EIL / Owner as per contract requirement (Refer Specification Nos. 6-78-0002 - Specification for Documentation Requirements from Contractors and 6-78-0003 - Specification for Documentation Requirements from Suppliers), or disposed as per relevant project procedure.

6.0 AUDITS

BIDDER shall plan and carry out the QMS audit for the job. Quality audit program shall cover design, procurement, construction management and commissioning as applicable including activities carried out by sub-vendors and sub-contractors. This shall be additional to the certification body surveillance audits carried out under BIDDER'S own ISO 9001 certification scheme.

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The audit programs and audit reports shall be available with bidder for scrutiny by EIL / Owner.EIL or Owner's representative reserves the right to attend, as a witness, any audit conducted during the execution of the WORKS.

In addition to above, EIL, Owner and third party appointed by EIL/Owner may also perform Quality and Technical compliance audits.BIDDER shall provide assistance and access to their systems and sub-contractor / vendor systems as required for this purpose.Any deficiencies noted shall be immediately rectified by BIDDER.

7.0 DOCUMENTATION REQUIREMENTS

BIDDER shall submit following QMS documents immediately after award of work (Within one week) for record / review by EIL / Owner/ TPIA(Third Party Inspection Agency), as applicable:

- Organization chart (for complete organization structure and for the project)
- Project Quality Plan/Quality Assurance Plan
- Job specific Inspection Test Plans, if not attached with PR
- Job Procedures
- Inspection/Test Formats

In addition to above QMS documents, following documentation shall be maintained by the BIDDER for submission to EIL / Owner on demand at any point of time during execution of the project:

- Quality Manual
- Certificate of approval for compliance to ISO9001 standard
- Procedure for Control of Non-conforming Product
- Procedure for Control of Documents
- Sample audit report of the QMS internal and external audits conducted during last one year
- Customer satisfaction reports from at least 2 customers
- Project QMS audit report
- Technical audit reports for the project
- Corrective action report on the audits

Documents as specified above are minimum requirements. BIDDER shall submit any other document/data required for completion of the job as per EIL/Owner instructions.

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SPECIFICATION FOR DOCUMENTATION REQUIREMENTS FROM SUPPLIERS

Rev. No.	Date	Purpose	Prepared by	Checked by	Standards Committee Convener	Standards Bureau Chairman
					Approved by	
3	29-09-2025	General Revision	QMS Standards Committee	QMS Standards Committee	AK	MN
2	01-06-2020	General Revision	QMS Standards Committee	QMS Standards Committee	SKB	SKS
1	12-03-2015	General Revision	QMS Standards Committee	QMS Standards Committee	MPJ	SC
0	04-06-2009	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND

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Abbreviations:

DCI	Document Control Index
EIL	Engineers India Limited
EPS	Electronic Procurement System
FOA	Fax of Acceptance
IC	Inspection Certificate
IRN	Inspection Release Note
ITP	Inspection and Test Plan
LOA	Letter of Acceptance
LR	Lorry Receipt
MR	Material Requisition
ODC	Over Dimension Consignment
PO	Purchase Order
PR	Purchase Requisition
PVC	Polyvinyl Chloride
QAP	Quality Assurance Plan
QMS	Quality Management System
RPO	Regional Procurement Office
TPIA	Third Party Inspection Agency
URL	Universal Resource Locator
V-Portal	Vendor Portal

QMS Standards Committee

Convener: Mr. Anil Kumar

Members:
Mr. Himangshu Pal (SCM-Inspection)
Mr. Ravindra Kumar (Const.)
Mr. Vinod Kumar (CQA)
Mr. Swapnil Vaishnav (Projects)
Mr.Vijay Kumar Garg (SCM)
Mr.Raju Kumar Pandey (Equipment Division)

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2.0	DEFINITIONS	4
3.0	REFERENCE DOCUMENTS	4
4.0	DOCUMENTATION REQUIREMENTS	4

Annexures:

S. No.	Title	Doc. No.
1.	Format for completeness of Final Documentation	Format No. 3-78-0004

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1.0 SCOPE

This specification establishes the Documentation Requirements from Suppliers.

All documents/data against the PO / PR / MR shall be developed and submitted to EIL/Owner by the suppliers for review / records, in line with this specification.

2.0 DEFINITIONS

2.1 Supplier

For the purpose of this specification, the word "SUPPLIER" means the person(s), firm, company or organization who has entered into a contract with EIL / Owner for delivery of some products and/orservices.The word is considered synonymous to bidder, contractor or vendor.

2.2 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

- Specification for Quality Management System Requirements from Bidders (Doc. No. 6-78-0001)

4.0 DOCUMENTATION REQUIREMENTS

4.1 Order Acknowledgement and Assigning Project Manager

After placement of order, Supplier shall acknowledge order through V-Portal within 7 days of receipt of FOA/PO. Supplier shall assign a Project Manager for that order though online portal and provide requisite details. Project Manager details shall include e-mail address, mailing address, mobile/telephone nos., fax nos. and name of Project Manager. All the system generated emails pertaining to that order shall be sent to the assigned Project Manager.

4.2 Documents/Data to be submitted by the Supplier

4.2.1 The Supplier shall submit the documents and data against the PO/PR/MR as per the list given in respectivePO/PR/MR.

4.2.2 Review of the supplier drawings/ documents by EIL would be only to review the compatibility with basic designs and concepts and in no way absolve the supplier of his responsibility/contractual obligation to comply with PR requirements, applicable codes, specifications and statutory rules/regulations.Any error/deficiency noticed during any stage of manufacturing/execution/inspection/ installation shall be promptly corrected by the supplier without any time and cost implications, irrespective ofcomments on the same were received from EIL during the drawing review stage or not.

4.2.3 Unless otherwise specified, submission of documents for Review/Records shall commence as follows from the date of Fax of Intent /Letter of Intent/ Fax of Acceptance (FOA)/ Letter of Acceptance (LOA):

QMS	-	1week
Document Control Index	-	2weeks
Other Documents/Drawings	-	As per approved Document Control Index

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4.2.4 Documents as specified in PO/PR/MR are minimum requirements.Supplier shall submit any other document/data required for completion of the job as per EIL/Owner instructions.

4.3 Style and Formatting

4.3.1 All Documents shall be in ENGLISH language and in M.K.S(Meter-Kilogram-Second) System of units.

4.3.2 Before forwarding the drawings and documents, contractor shallobtain the title block from EIL and ensure that the following information are properly mentioned in each drawing:

- Purchase Requisition Number
- Name of Equipment / Package
- Equipment / Package Tag No.
- Name of Project
- Client
- Drawing / Document Title
- Drawing / Document No.
- Drawing / Document Revision No. and Date

4.4 Review and Approval of Documents by Supplier

4.4.1 All, the Drawing/Documents shall be reviewed, checked, approved and duly signed/stamped by supplier before submission.Revision number shall be changed during submission of the revised supplier documents and all revisions shall be highlighted by clouds. Whenever the supplierrequires any sub-supplier drawings to be reviewed by EIL, the same shall be submitted by the supplier duly reviewed, approved and stamped by the supplier.Direct submission of sub-supplier's drawings without contractor's / suppliers' approval shall not be entertained.

4.5 Document Category

Following review codes shall be used for review of supplier Drawings/Documents:

Code 1 - No comments. Proceed with Manufacture / Fabrication / Construction as per the document.

Code 2 - Proceed with Manufacture / Fabrication / Construction as per commented document. Revised document required.

Code 3 - Document does not conform to basic requirements as marked.Resubmitfor review.

Code R - Document is retained for Records. Proceed with Manufacturing / fabrication as per Tender/ ContractRequirement.

Code V - Void, Document is returned as invalid.

Document is marked as Void under following conditions:

a) Wrong item drawing uploaded.
b) Superseded or obsolete submission.
c) Duplicate submission.
d) Out of sequence submission.
e) Mismatch in document name and title under which document uploaded.
f) Document not legible.
g) For PMC projects, document not signed and stamped by contractor and DEC

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4.6 Methodology for Submission of Documents to EIL/Owner

4.6.1 Document Control Index (DCI)

Supplier shall create and submit Document Control Index (DCI) forreview based on PO/PR/MR along with schedule date of submission of each drawing/document on EIL Vendor Portal.The DCI shall be specific with regard to drawing/document no. and the exact title. Proper sequencing of the drawings/documents should be ensured in schedule date of submission.

4.6.2 Submission of Drawings/Documents / Data

Drawings/documents, data and DCI shall be uploaded on the EIL Vendor Portal as per approved DCI. The detailed guidelines for uploading documents on EIL VendorPortal are available on URL:**http://edocx.eil.co.in/vportal**

4.6.3 Statutory Approvals

Wherever approval by any statutory body is required to be taken by Supplier, the Supplier shall submit copy of approval by the authority to EIL.

4.6.4 Manufacturing Schedule

Supplier shall prepare milestone based(milestones such as document submission, sub ordering, manufacturing, Inspection, dispatches, etc.) manufacturing schedule for the order, to meet delivery as per FOA/PO terms. Supplier shall submit manufacturing schedule to concerned Regional Procurement Office (RPO) of EIL, with a copy to Head office monitoring team/Owner for review within 7 days from date of FOA/PO.Same shall be uploaded in the EPS portal of EILi.e.,https://www6.eil.co.in/epsinspection/supp

4.6.5 Schedule and Progress Reporting

Supplier shall submit Monthly Progress Report(MPR) on or before the 9th of every monthindicating following milestone-based progress details as minimum:

- Drawing submission and approval status and schedule for submission of revised drawing / fresh Drawing requiring approval as per approved DCI
- Sub-ordering plan/details for all major items indicating item description, sub-order number, Date of sub-ordering, sub-vendor name, Location, contractual delivery data and expected delivery dates at main vendor's shop and other critical details requiring timely receipt of sub-ordered items at shop.
- Shop manufacturing progress indicating major milestone progress, in case of missing any milestone date, catch up plan for the same and expected dispatch date from shop and expected delivery date at site.
- Area requiring special attention/concern and proposed action plan to resolve the same.

First Monthly Progress Report (MPR) shall be submitted within2 weeks from FOA/LOA.In case of exigencies, EIL/Owner can ask for report submission as required on weekly/fortnightly/ad-hoc basis depending upon supply status and supplier shall furnish such reports promptly without any price implication.Format for progress report shall be submitted by the Supplier during kick off meeting or within 2 weeks of receiving FOA/LOA, whichever is earlier.

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4.7 Inspection and Testing

4.7.1 Quality Assurance Plan/Inspection and Test Plan

If Inspection and test plans (ITP)are attached with MR/PR same shall be followed along with additional tests requirement (if any) mentioned in MR/ PR. However for cases wherein EIL Standard ITPs not available/ have not been attached with MR/PR, Supplier shall submit within one week of receiving FOA/LOA, the Quality Assurance Plan for inspection & testing at various stages of production, quality control records for critical bought out items/ materials and site assembly & testing as may be applicable to the specific order and obtain approval from concerned Regional procurement Office of EIL/third party inspection agency, as applicable.

For Package equipment contracts, the supplier shall prepare a list of items/ equipment and their inspection categorization plan for all items included in the scope of supply immediately after receipt of order and obtains approval for the same from EIL. The items shall be categorized into different categories depending upon their criticality for the scope of inspection of TPIA and/or EIL.

4.7.2 Inspection Requirements:

Supplier shall perform internal inspection as per ITP/ approved QAP at their works based on approved documents/drawings. Upon satisfactory internal inspection, supplier shall raise inspection call through Inspection call Module of EPS (https://www6.eil.co.in/epsinspection) to concerned Regional Procurement Office (RPO) of EIL/ TPIA/ Owner with advance notice as per contractalong with Internal test reports. Where inspection is not in the scope of EIL and is carried out by nominated Third Party Inspection agency (TPIA), Inspection Release Note (IRN) issued by the nominated TPIA along with Manufacturer's Test Certificate (MTC) shall be uploaded in EIL EPS Portal (https://www6.eil.co.in/epsinspection).

All changes w.r.t. PR shall be recorded through agreed variations or Concessions & Deviations. Conflict, if any, between PR / Job specifications and approved drawings, shall be brought to the notice of EIL / owner bythe supplier/ contractor. Decision of EIL / owner will be binding on the supplier and to be complied without time and cost implications.

Identified bought out items/ raw material shall be procured under TPIA as per ITP.

4.7.3 Inspection Release Note (IRN)/ Inspection Certificate (IC)

IRN/ IC shall be issued by EIL Inspector/ third party inspection agency on successful inspection, review of test reports/ certificates as per specifications &ITP/ agreed quality plan (as applicable) and only after all the drawings/documents as per DCI are submitted and are accepted under review code-1or code R. Supplier shall ensure that necessary documents/manufacturing and test certificates are made available to EIL/TPIA as and when desired.

Note 1: Non fulfilling above requirement shall result into appropriate penalty or with- holding of payment as per conditions of PO/PR/MR.

Note 2: For items where IRN/IC is issued by TPIA, supplier to ensure that following as a minimum must be mentioned by TPIA in IRN/IC:

a) PR document number
b) List of drawings/documents with EIL approval code
c) Tests witnessed, documents reviewed

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d) Compliance statement by TPIA that product meets the requirement as specified in EIL PR, standard specifications, Inspection Test Plan/QAP and approved documents.

4.8 Transportation Plan

Transportation Plan for Over Dimensional Consignments (ODC), if any, shall be submitted within 2 weeks of receiving FOA/LOA, for approval. Unless otherwise specified, consignments with parameters greater than following shall be considered as over dimensional.

Dimensions : 4 meters width x 4 meters height x 20 meters length

Weight : 32 MT (Metric Ton)

Dimensions and weight provided above are inclusive of all nozzles, attachments, transportation saddles etc.

Physical Rout survey for ODC movement shall be submitted to EIL within 8 weeks of receiving FOA / LOA.

4.9 Dispatch Details

Upon receipt of IRN/IC from EIL inspector/TPIA, supplier shall dispatch items within 2 days. Item wise dispatch details shall be uploaded in EIL's EPS module within 24 hours of any item dispatched from shop, indicating PR item no, Quantity dispatched, Transporter's name, LR Number/ LR date.

4.10 Vendorshall ensure timely uploading of Manufacturing Schedule, Monthly Progress Report,Inspection Certificate (IRN)issued by the TPIA (as applicable for PO where Inspection is under nominated Third Party Inspection Agency)and updation ofitem wise dispatch details in EPS portal of EIL (https://www6.eil.co.in/epsinspection).

4.11 Final Documentation

4.11.1 Supplier shall prepare final documents in line with VDR(Vendor Document Requirements) attached with PR/Tender. A copy of final document along with filled in Format for Completeness of Final Documentation (Format No. 3-78-0004) to be submitted to EIL Inspector/TPIA for review & approval within 2 weeks from dispatch. Upon receipt of EIL/TPIA endorsement on Completeness of Final Documents, supplier shall submit soft/hard copies of Final documents to EIL/Owner in requisite quantity as per PO/PR details, along with covering letter. A copy of covering letter to be submitted to the concerned Regional Procurement Office (RPO) of EIL/Owner.

4.11.2 As Built Drawings

Minor Shop changes made by Supplier after approval of drawings under 'Code 1' by EIL and deviations granted through online system, if any, shall be marked in hard copies of drawings which shall then be stamped 'As-built' by the supplier.These 'As-built' drawings shall be reviewed and stamped by EIL Inspector/TPIA.Supplier shall prepare scanned images files of all marked – up 'As – built' drawings. Simultaneously Supplier shall incorporate the shop changes in the native soft files of the drawings also.

4.11.3 Packing/Presentation of Final Documents

Final Documents shall be legible photocopies in A4, A3 size only.Drawings will be inserted in plastic pockets (both sides transparent, sheet thickness minimum 0.1 mm) with an extra strip of 12 mm wide for punching so that drawings are well placed.

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Final Documentation shall be bound in Hard board Plastic folder(s) of size 265 mm x 315 mm (10½-inch x 12½-inch) and shall not be more that 75 mm thick. It may be of several volumes and each volume shall have a volume number, index of volumes and index of contents of that particular volume.Where number of volumes are more, 90mm thickness can be used.Each volume shall have top PVC sheet of minimum 0.15 mm thick duly fixed and pressed on folder cover and will have 2 lever clips.In case of imported items documents, 4 lever clip shall also be accepted.All four corners of folders shall be properly metal clamped.Indexing of contents with page numbering must be incorporated by supplier.Spiral/Spico bound documents shall not be acceptable.As mentioned above, books should be in hard board plastic folders with sheets punched and having 2/4 lever clips arrangement.

Each volume shall contain on cover a Title Block indicating package Equipment Tag No. & Name, PO/Purchase Requisition No., Name of Project and Name of Customer.Each volume will have hard front cover and a reinforced spine to fit thickness of book.These spines will also have the title printed on them.Title shall include also volume number (say 11 of 15) etc.

4.11.4 Submission of Soft Copies

Supplier shall submit to EIL, the scanned images files as well as the native files of drawings/documents, along with proper index.

In addition to hard copies, Supplier shall submit soft copies of all the final drawings and documents in pen drive or any other specified medium with proper identification tag, all text documents prepared on computer, scanned images of all important documents (not available as soft files), all relevant catalogues, manuals available as soft files (editable copies of drawings/text documents, while for catalogues/manuals/proprietary information and data, PDF files can be furnished). All soft files shall be appropriately named, systematically indexed, and duly bookmarked in PDF format to facilitate ease of reference and access.

All the above documents shall also be uploaded on the EILVendor Portal and if applicable on Client Server also.

4.11.5 Completeness of Final Documentation

Supplier shall get the completeness of final documentation verified by EIL/TPIA,as applicable, and attach the Format for Completeness of Final Documentation (Format No. 3-78-0004) duly signed by EIL Inspector or TPIA as applicable to the final document folder.

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COMPLETENESS OF FINAL DOCUMENTATION

Name of Supplier/Contractor	:	
Customer	:	
Project	:	
EIL's Job No.	:	
Purchase Order No./ Contract No.	:	
Purchase Requisition No./ Tender No.	:	Rev. No.:
Name of the Work/ Equipment	:	
Tag. No.	:	
Supplier's/ Contractor's Works Order No.	:	

Certified that the Engineering Documents/ Manufacturing & Test Certificates submitted by the supplier (as per Index sheet mentioned in Annexure-1) are complete in accordance with the Vendor Data Requirements of Purchase Requisition / Tender.

Signature	: ……	Signature	: ……
Date	: ……	Date	: ……
Name	: ……..	Name	: ……..
Designation	: ……	Designation	: ……
Department	: ……	Department	: ……
	Supplier/Contractor		EIL/TPIA

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Annexure-1

Final Documentation Index Sheet			
PR/PO/Tender No.		Revision No.	
Serial No.	Document Title	Page/ Folder No.	No. of Pages

Signature	: ……	Signature	: ……
Date	: ……	Date	: ……
Name	: ……..	Name	: ……..
Designation	: ……	Designation	: ……
Department	: ……	Department	: ……

Supplier / Contractor

EIL / TPIA

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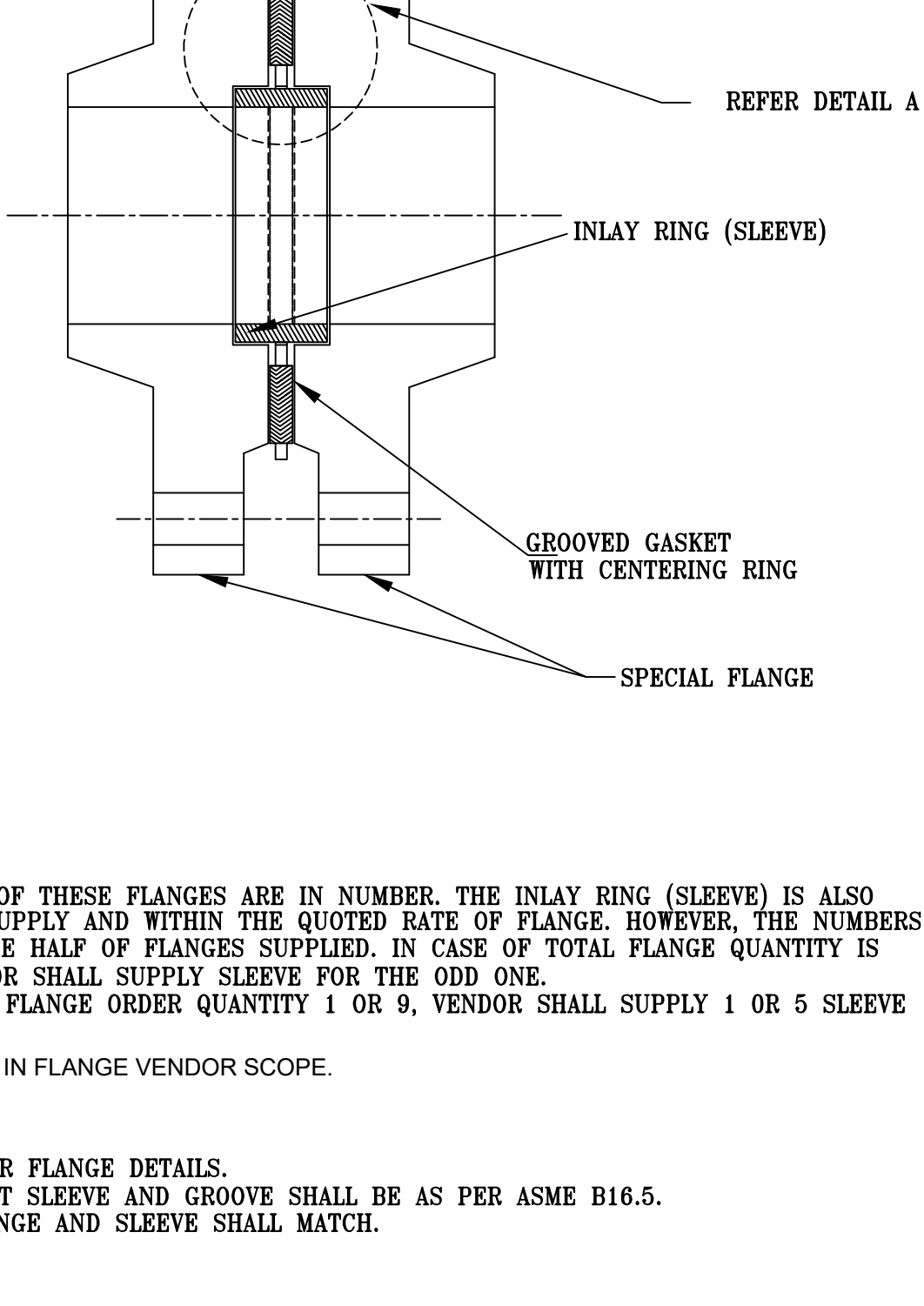
PROJECT: EPCM SERVICES FOR POLYPROPYLENE PROJECT AT NUMALIGARH REFINERY UNIT: PPU	REV.	DATE	REVISION	BY	CHECKED	APPD.
	0	09.01.26	ISSUED FOR CONSTRUCTION	VD	AV	LSJ
JOB NO:- C050 UNIT-1P39A						



SPECIAL NOTES:

1. THE MR QUANTITY OF THESE FLANGES ARE IN NUMBER. THE INLAY RING (SLEEVE) IS ALSO PART OF VENDOR SUPPLY AND WITHIN THE QUOTED RATE OF FLANGE. HOWEVER, THE NUMBERS OF SLEEVE SHALL BE HALF OF FLANGES SUPPLIED. IN CASE OF TOTAL FLANGE QUANTITY IS ODD FIGURE, VENDOR SHALL SUPPLY SLEEVE FOR THE ODD ONE.
   EXAMPLE- AGAINST FLANGE ORDER QUANTITY 1 OR 9, VENDOR SHALL SUPPLY 1 OR 5 SLEEVE RESPECTIVELY.
   THE GASKET IS NOT IN FLANGE VENDOR SCOPE.

NOTES:

1. REFER SHEET 2 FOR FLANGE DETAILS.
2. ALL DETAILS EXCEPT SLEEVE AND GROOVE SHALL BE AS PER ASME B16.5.
3. INNER DIA. OF FLANGE AND SLEEVE SHALL MATCH.

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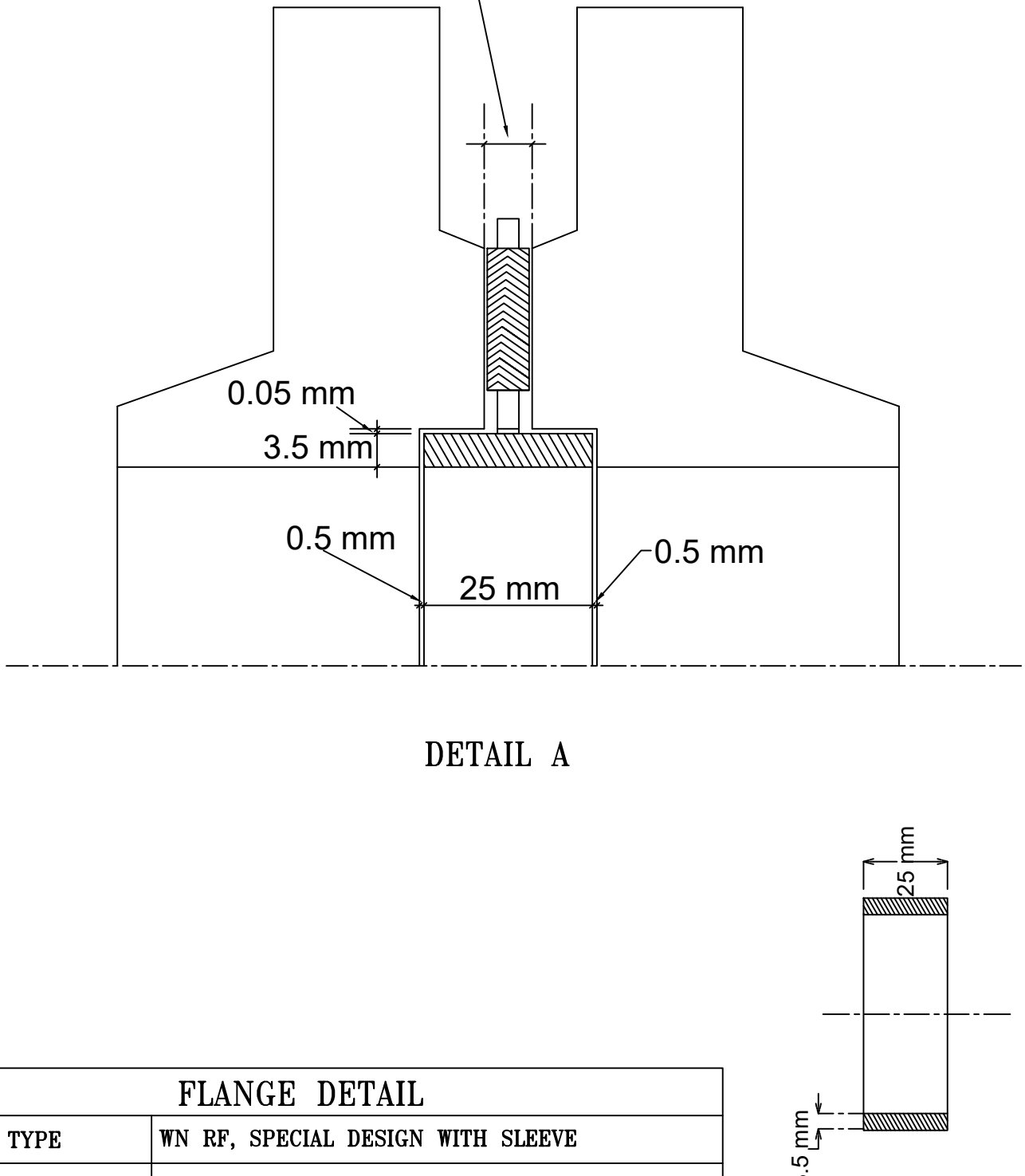
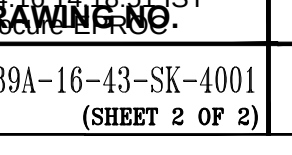
ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)	SPECIAL FLANGE FOR POWDER LINE	DRAWING NO.	REV.
		C050-1P39A-16-43-SK-4001 (SHEET 1 OF 2)	0

Page 492 of 493 : C050-1P39A-YR-MR-1360-42-RFQ : Rev: A

PROJECT: EPCM SERVICES FOR POLYPROPYLENE PROJECT AT NUMALIGARH REFINERY UNIT: PPU JOB NO:- C050 UNIT-1P39A	REV.	DATE	REVISION	BY	CHECKED	APPD.
	0	09.01.26	ISSUED FOR CONSTRUCTION	VD	AV	LSJ



DETAIL A



SLEEVE DETAIL

FLANGE DETAIL	
TYPE	WN RF, SPECIAL DESIGN WITH SLEEVE
RATING	CLASS 600 ASME B16.5
FLANGE FACE FINISH	125 AARH
SIZE & THICKNESS	AS PER MR
FLANGE MATERIAL	ASTM A 182 GR.F316/316L DUAL GRADE
SLEEVE MATERIAL	ASTM A 312 TP 316/316L DUAL GRADE, SEAMLESS

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Signature Not Verified
Digitally signed by VAIBHAV GUNJAL
Date: 2026.04.16 14:18:51 IST
Location: eProcure EPROC

ENGINEERS INDIA LIMITED (A Govt. of India Undertaking)

SPECIAL FLANGE FOR POWDER LINE

DRAWING NO.	REV.
C050-1P39A-16-43-SK-4001 (SHEET 2 OF 2)	0

C050-1P39A-YR-MR-1360-42-RFQ - Rev: A
Page 404