# DEENDAYAL PORT AUTHORITY

(An ISO 9001: 2015 & ISO 14001: 2004 Certified Port)

## MECHANICAL ENGINEERING DEPARTMENT

### ELECTRICAL DIVISION

TENDER NO. EL/AC/2776

Construction of new Godowns in place of existing Godown No. 19 to 21 & 25 inside Cargo Jetty area – Electrification Work

Executive Engineer (E)
Electrical Division
Deendayal Port Authority
7, Ground Floor,
Nirman Building,
New Kandla – 370 210.
Phone No. (02836) 270352
E-mail: deepak.hazra@deendayalport.gov.in

## NOTICE NO. EL/AC/2776

<table>
<tr><td>Name of work</td><td>Construction of new Godowns in place of existing Godown No. 19 to 21 & 25 inside Cargo Jetty area – Electrification Work</td></tr>
<tr><td>Estimated cost put to tender</td><td>₹3,13,28,293.00</td></tr>
<tr><td>Tender fee:</td><td>₹5,000 + 900 (GST) Present rate of GST is 18%</td></tr>
<tr><td>EMD</td><td>₹3,13,283.00<br>Through on line transfer in PNB bank account no. 2177002100004628 - Deendayal Port Authority - (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website.<br>In case of Micro and Small Enterprise (MSEs) holding valid certificate issued by any agencies/organization under the Ministry of Micro, Small and Medium Enterprises indicating the list of activity related to the subject tender as per National Industrial Classification-2008 mentioned in the table below only shall become eligible for exemption from payment of Tender fee/EMD. Such bidder shall upload the scanned copy of valid Certificate along with duly filled & signed Bid Securing Declaration (Form – 6) in preliminary bid failing which the bid shall be considered non-responsive.
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<tr><td>Level</td><td>Description</td></tr>
<tr><td>Section – D</td><td>ELECTRICITY, GAS, STEAM AND AIRCONDITION SUPPLY</td></tr>
<tr><td>Division – 35</td><td>ELECTRICITY, GAS, STEAM AND AIRCONDITION SUPPLY</td></tr>
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<tr><td>Sub Class – 35109</td><td>Collection and distribution of electric energy to households, industrial, commercial and other users n.e.c.</td></tr>
</table></td></tr>
<tr><td>Last date of downloading</td><td>21/06/2024 up to 14:00</td></tr>
<tr><td>Last date and time of submission of E-tender</td><td>21/06/2024 up to 14:30 only on website https://kpt.nprocure.com:</td></tr>
<tr><td>Pre-bid meeting</td><td>Not Applicable</td></tr>
<tr><td>Date and time for opening of E-tender</td><td>21/06/2024 at 15:00 Hrs.</td></tr>
<tr><td>Downloading websites</td><td>https://kpt.nprocure.com, http://www.deendayalport.gov.in as well as http://www.eprocure.gov.in.</td></tr>
<tr><td colspan="2">Corrigendum, if any, will be placed on websites only.</td></tr>
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**Executive Engineer (Electrical)**
**Deendayal Port Authority**

## NOTICE INVITING ON LINE TENDER

| | |
|---|---|
| **Department Name** | Mechanical Engineering Department |
| **Circle/ Division** | Electrical Division, Port & Customs Building,<br>Ground Floor, New Kandla - (Kutch)-370210 |
| **Tender Notice No.** | EL/AC/2776 |
| **Name of Project** | Construction of new Godowns in place of existing Godown No. 19 to 21 & 25 inside Cargo Jetty area – Electrification Work |
| **Name of Work** | Construction of new Godowns in place of existing Godown No. 19 to 21 & 25 inside Cargo Jetty area – Electrification Work |
| **Estimated Contract Value (INR)** | ₹3,13,28,293.00 |
| **Period of Completion (in Months)** | Six months from the date of issue of Work Order |
| **Bidding Type** | Open |
| **Bid Call (Nos.)** | One |
| **Tender Currency Type** | Single |
| **Tender Currency Settings** | Indian Rupee (INR) |
| **Qualifying Criteria:** | PRE-QUALIFICATION CRITERIA FOR ELIGIBLE BIDDERS:<br>The Bidders shall fulfill the following pre-qualification criteria:<br>a) Average Annual financial turnover during the last 3 years, ending 31st March of the previous financial year, should be at least ₹93,98,488.00 Certified by Chartered Accountant.<br>b) Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:<br>i) Three similar completed works each costing not less than the amount equal to ₹1,25,31,317.00 (excluding GST).<br>Or<br>ii) Two similar completed works each costing not less than the amount equal to ₹1,56,64,147.00 (excluding GST).<br>Or<br>iii) One similar completed work costing not less than the amount equal to ₹2,50,62,634.00 (excluding GST).<br>IMPORTANT:<br>(i) In case a work is started prior to 07 (seven) years, ending last of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfilment of credentials.<br>(ii) If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfilment of credentials. |

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| | (iii) If a part or a component of work is completed but the overall scope of contract is not completed, such work shall not be considered for fulfilment of technical credentials even if the cost of part completed work/component is more than required for fulfilment of credentials.<br><br>(iv) In case a work is considered similar in nature for fulfilment of technical credentials, the overall cost of that work shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.<br><br>(v) Bidder shall submit legally enforceable undertaking jointly executed by himself and the Manufacturer/Authorized Channel Partner of LED High Bay & LED Flood Light Fittings for satisfactory design, manufacture, supply, installation, testing, commissioning and performance including all warranty obligations as per Technical Specification, General & Special conditions of Contract.<br><br>(vi) Bidder shall submit their detailed illumination design report for Storage Shed I & II, as per the details provided in the Technical Specification, showing the illumination level at ground level with quantity of LED high bay fittings, Position of LED high bay fittings in width & length of the Shed, Mounting height of LED high bay fittings, maintenance factor, reflection factor & uniformity ratio (Emin/Eavg) in a grid of 5m×5m (For Shed – I (402m × 30m) size of grid shall not be less than 81×7 points and for Shed – II (750m × 30m) size of grid shall not be less than 151×7 points). Any deviation from any of the parameters, mentioned above, in the illumination design submitted by the bidder shall not be considered & the bid shall be rejected.<br><br>(vii) Bidder shall submit their detailed illumination design report for Platform Area of Storage Shed I & II, as per the details provided in the Technical Specification, showing the illumination level at ground level of platform with quantity of LED high bay fittings, Position of LED high bay fittings in width & length of the Platform, Mounting height of LED high bay fittings, maintenance factor, reflection factor & uniformity ratio (Emin/Eavg) in a grid of 5m×5m (size of grid shall not be less than 151×2 points). Any deviation from any of the parameters, mentioned above, in the illumination design submitted by the bidder shall not be considered & the bid shall be rejected.<br><br>(viii) Bidder shall submit LM79 test reports of (1) offered LED High bay fitting for inside Shed Area, (2) LED High Bay fitting for Platform Area & (3) LED Flood Light fitting, issued by any NABL accredited laboratory only for calculation of power consumption of the design along with the bid document.<br><br>c) Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. |

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| | The available bid capacity will be calculated as under:<br><br>Assessed Available Bid capacity = A x N x 2 –B,<br><br>Where,<br><br>"N" = Number of years prescribed for completion of the subject contract.<br><br>"A" = Maximum value of works executed in any one year during last seven years (at current price level).<br><br>"B" = Value at current price level of existing commitments and on-going works to be completed in the next 'N' years.<br><br>The Bidder shall furnish statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works preferably countersigned by the Nodal Office or his nominee-in charge.<br><br>IMPORTANT:<br><br>(i) The value of annual turnover is not to be considered towards "A" as mentioned in the formula.<br><br>(ii) The information may be provided as per the format given at Section-IX.<br><br>d) In Case the similar work has been issued for any private body, the bidder will be required to produce the tax deducted at source (TDS) certificate indicating the income tax deducted by the client for that work, which will form the basis for assessing the value of completed work.<br><br>IMPORTANT:<br><br>(i) The particular raw in the TDS certificate (Form 16 or Form 26A), which indicates the credit of the payment received from the client, should be highlighted.<br><br>(ii) Along with the TDS certificate, a declaration on the letter head of a Chartered Accountant should be submitted giving details such as the name of bidder, the name of the client for which the bidder has carried out the work, name of work, work order no. and date, gross amount of the payment, net amount received from the client, TDS amount. The statement should be signed by the Chartered Accountant.<br><br>(iii) In case any discrepancies between the TDS (Form 16 or Form 26A) and the declaration given by the Chartered Accountant with regard to payment received from the client, it should be explained.<br><br>e) The contractor shall have valid electrical contractor's license for carrying out electrical work of nature involved in this tender obtained from the competent authority of their respective states without which the tender shall not be accepted. Contractor shall |

<table>
<tr><td></td><td>submit copy of the license in lieu of the same for consideration.</td></tr>
<tr><td>Definition of Similar work</td><td>Similar work means "Supply, installation, testing and commissioning of Indoor or Outdoor Lighting" executed for Government or Public Sector Undertaking or any reputed Industrial Organization in private sector.</td></tr>
<tr><td>Joint Venture</td><td>Not Allowed</td></tr>
<tr><td>Rebate</td><td>Not applicable</td></tr>
<tr><td>Bid Document Fee:</td><td>₹ 5,000 + 900 (GST) Present rate of GST is 18%<br>Through on line transfer in PNB bank account no. 2177002100004628 - Deendayal Port Authority - (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website.<br>In case of Micro and Small Enterprise (MSEs) holding valid certificate issued by any agencies/organization under the Ministry of Micro, Small and Medium Enterprises indicating the list of activity related to the subject tender as per National Industrial Classification-2008 mentioned in the table below only shall become eligible for exemption from payment of Tender fee/EMD. Such bidder shall upload the scanned copy of valid Certificate along with duly filled & signed Bid Securing Declaration (Form – 6) in preliminary bid failing which the bid shall be considered non-responsive.
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<tr><td>Sub Class – 35109</td><td>Collection and distribution of electric energy to households, industrial, commercial and other users n.e.c.</td></tr>
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<tr><td>Bid Document Fee Payable To:</td><td>Through on line transfer in PNB bank account no. 2177002100004628 - Deendayal Port Authority - (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website.</td></tr>
<tr><td>Bid Security/ EMD (INR) :</td><td>₹3,13,283.00<br>Through on line transfer in PNB bank account no. 2177002100004628 - Deendayal Port Authority - (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website.<br>In case of Micro and Small Enterprise (MSEs) holding valid certificate issued by any agencies/organization under The Ministry of Micro, Small and Medium Enterprises indicating the list of activity related to the subject tender as per National Industrial Classification-2008 mentioned in the table below only shall become eligible for exemption from payment of Tender fee/EMD. Such bidder shall upload the scanned copy of valid Certificate along with duly filled & signed Bid Securing Declaration (Form – 6) in preliminary bid failing which the bid shall be considered non-responsive.</td></tr>
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<tr><td>Bid Security/ EMD (INR) In Favor of:</td><td>Through on line transfer in PNB bank account no. 2177002100004628 - Deendayal Port Authority - (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website.</td></tr>
<tr><td>Bid Document Downloading Start Date</td><td>07/06/2024</td></tr>
<tr><td>Bid Document Downloading End Date</td><td>21/06/2024 up to 14:00 Hrs.</td></tr>
<tr><td>Date & Place of Pre Bid Meeting</td><td>Not Applicable</td></tr>
<tr><td>Last Date & Time for Receipt of Bids</td><td>21/06/2024 @ 14:30 Hrs.</td></tr>
<tr><td>Bid Validity Period</td><td>120 Days</td></tr>
<tr><td>Condition</td><td>(1) Tender Fee shall be submitted through on line transfer in PNB bank account no. 2177002100004628 - Deendayal Port Authority - (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website.<br><br>In case of Micro and Small Enterprise (MSEs) holding valid certificate issued by any agencies/organization under The Ministry of Micro, Small and Medium Enterprises indicating the list of activity related to the subject tender as per National Industrial Classification-2008 mentioned in the table below only shall become eligible for exemption from payment of Tender fee/EMD. Such bidder shall upload the scanned copy of valid Certificate along with duly filled & signed Bid Securing Declaration (Form – 6) in preliminary bid failing which the bid shall be considered non-responsive.
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| | 3510 \| distribution<br>Sub Class - 35109 \| Collection and distribution of electric energy to households, industrial, commercial and other users n.e.c.<br><br>(2) EMD: Through on line transfer in PNB bank account no. 2177002100004628 - Deendayal Port Authority - (IFSC code PUNB0217700). Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website. In case of Micro and Small Enterprise (MSEs) holding valid certificate issued by any agencies/organization under The Ministry of Micro, Small and Medium Enterprises indicating the list of activity related to the subject tender as per National Industrial Classification-2008 mentioned in the **table below only shall become eligible for exemption** from payment of Tender fee/EMD. Such bidder shall upload the scanned copy of valid Certificate along with duly filled & signed Bid Securing Declaration (Form – 6) in preliminary bid failing which the bid shall be considered non-responsive.<br><br>**Level** \| **Description**<br>Section – D \| ELECTRICITY, GAS, STEAM AND AIRCONDITION SUPPLY<br>Division – 35 \| ELECTRICITY, GAS, STEAM AND AIRCONDITION SUPPLY<br>Group - 351 \| Electric power generation, transmission and distribution<br>Class – 3510 \| Electric power generation, transmission and distribution<br>Sub Class - 35109 \| Collection and distribution of electric energy to households, industrial, commercial and other users n.e.c.<br><br>(3) Integrity Pact Agreement duly signed by the bidder and witness shall be submitted as per Clause No. 8(2) & 8(3) of Section – III of tender in preliminary bid.<br><br>**NOTE: Accordingly, offer of those bidders shall only be opened whose EMD, Tender Fee and Integrity Pact are received as mentioned above.** |
| Remarks | Bidder has to upload the scanned copy of EMD & Tender fee (MSME certificate in case of exemption) and Integrity Pact duly signed by bidder and witness (as per Clause No. 8(2) & 8(3) of Section – III of tender) in preliminary bid submission, without which technical bid will not entertained.<br><br>The hard copies should reach to the Electrical Division within 07 days from the date of opening of preliminary bid. |
| Bid Opening Date | Technical Bid will be opened on 21/06/2024 @ 15:00 Hrs. Date of opening of price bid shall be notified after scrutiny and evaluation of |

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| | Technical Bid. |
| Documents required to be submitted by scanning through online | Documents in support of fulfilling Qualifying Criteria as indicated above.<br>Tender fees plus GST: As indicated above.<br>EMD: As indicated above.<br>Integrity Pact duly signed by bidder and witness (as per Clause No. 8(2) & 8(3) of Section – III of tender)<br>Documents Mentioned in Eligibility Criteria. |
| Officer Inviting Bids: | Executive Engineer (Electrical), Electrical Division, Nirman Building, Ground Floor, New Kandla, Kutch, Gujarat 370210. |
| Bid Opening Authority : | Executive Engineer (Electrical) |
| Address: | Executive Engineer (Electrical), Electrical Division, Nirman Building, Ground Floor, New Kandla, Kutch, Gujarat 370210. |
| Contact Details : | Executive Engineer (Electrical), Electrical Division, Nirman Building, Ground Floor, New Kandla, Kutch, Gujarat 370210. Mobile No. 98252 27048.<br>E-mail ID: deepak.hazra@deendayalport.gov.in |

**In case, bidders need any clarifications or if training is required to participate in online Tenders, they can contact (n) Procure Support team at following address:**

(n) Code Solutions-A division of GNFC Ltd.,

(n)Procure Cell 403, GNFC Info tower, S.G. Road, Bodakdev, Ahmadabad – 380054 (Gujarat)

**Contact Details**:

**Airtel**: +91-79-40007501, 40007512, 40007516, 40007517, 40007525

**BSNL**: +91-79-26854511, 26854512, 26854513 (EXT: 501, 512, 516, 517, 525)

**Reliance:** +91-79-30181689 Fax: +91-79-26857321, 40007533

**E-mail:**nprocure@gnvfc.net

**TOLL FREE NUMBER:** 1-800-233-1010 (EXT: 501, 512, 516, 517, 525)

**Executive Engineer (Electrical)**
**Deendayal Port Authority**

## SECTION – I
## INSTRUCTION TO BIDDERS

### A. GENERAL

### 1. Scope of Bid

1.1 The Executive Engineer (Electrical), Deendayal Port Authority invites bids by E-Tendering from the interested eligible bidder for the work as mentioned in the notice inviting online tender. All bids shall be completed and submitted on-line in accordance with instruction to the bidders.

1.2 The successful bidder will be expected to complete the works by the intended completion period.

### 2. Source of funds

2.1 The employer has arranged the funds from the internal resources and will have sufficient funds in India Currency for execution of the work.

### 3. Eligible Bidders

Only eligible bidders fulfilling all the requirements as mentioned in the Notice Inviting Online Tender may participate in the subject Tender. Successful completion of "Similar Works" only shall be considered for evaluation of eligibility criteria.

3.1 The invitation for Bids is open to all eligible bidders meeting the eligibility criteria as defined in clause regarding Eligibility Criteria.

3.2 All bidders shall fill the forms provided in Section – IV- Part – I "To be submitted by Bidders with their Bids".

3.3 Government-owned enterprises may participate if they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the employer subject to fulfilment of Minimum Qualifying criteria.

3.4 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the employer.

### 4. Eligibility Criteria:

**4.1** **(I)** The Bidders shall fulfill the following pre-qualification criteria:

| Sr. No. | Particulars | Supporting Documents |
|---|---|---|
| (A) | Average Annual financial turnover during the last 3 years, ending 31st March of the previous financial year, should be at least ₹93,98,488.00 Certified by Chartered Accountant. | Certificate should be issued by the Chartered Accountant. |
| (B) | Experience of having successfully completed similar works during last 7 years ending last day of month previous to | (a) A copy of the completion certificate in respect of the successfully completed similar work. |

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| | the one in which applications are invited should be either of the following:<br><br>(1) Three similar completed works each costing not less than the amount equal to ₹1,25,31,317.00 (excluding GST).<br><br>Or<br><br>(2) Two similar completed works each costing not less than the amount equal to ₹1,56,64,147.00 (excluding GST).<br><br>Or<br><br>(3) One similar completed work costing not less than the amount equal to ₹2,50,62,634.00 (excluding GST). | (b) A copy of detail work order should also be submitted for which the bidder is submitting the completion certificate.<br><br>Such completion certificate should be issued on the letter head of the client and invariably reflect the following details:<br><br>(1) Name of Contractor (2) Name of Work (3) Number of Work Order/Agreement and date (4) Contract value (5) Contract period (6) Date of commencement of work (7) Date of completion of work (8) Value of Work executed during the contract period/original contract period (9) Date of issue of completion certificate.<br><br>IMPORTANT:<br><br>(i) In case a work is started prior to 07 (seven) years, ending last of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfilment of credentials.<br><br>(ii) If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfilment of credentials.<br><br>(iii) If a part or a component of work is completed but the overall scope of contract is not completed, such work shall not be considered for fulfilment of technical credentials even if the cost of part completed work/component is more than required for fulfilment of credentials.<br><br>(iv) In case a work is considered similar in nature for fulfilment of technical credentials, the overall cost of that work shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.<br><br>(v) Bidder shall submit legally enforceable undertaking jointly executed by himself and the Manufacturer/Authorized Channel Partner of LED High Bay & LED Flood Light Fittings for satisfactory design, manufacture, supply, installation, testing, commissioning and performance including all warranty obligations as per Technical Specification, General & Special |

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| | | conditions of Contract.<br><br>(vi) Bidder shall submit their detailed illumination design report for Storage Shed I & II, as per the details provided in the Technical Specification, showing the illumination level at ground level with quantity of LED high bay fittings, Position of LED high bay fittings in width & length of the Shed, Mounting height of LED high bay fittings, maintenance factor, reflection factor & uniformity ratio (Emin/Eavg) in a grid of 5m×5m (For Shed – I (402m × 30m) size of grid shall not be less than 81×7 points and for Shed – II (750m × 30m) size of grid shall not be less than 151×7 points). Any deviation from any of the parameters, mentioned above, in the illumination design submitted by the bidder shall not be considered & the bid shall be rejected.<br><br>(vii) Bidder shall submit their detailed illumination design report for Platform Area of Storage Shed I & II, as per the details provided in the Technical Specification, showing the illumination level at ground level of platform with quantity of LED high bay fittings, Position of LED high bay fittings in width & length of the Platform, Mounting height of LED high bay fittings, maintenance factor, reflection factor & uniformity ratio (Emin/Eavg) in a grid of 5m×5m (size of grid shall not be less than 151×2 points). Any deviation from any of the parameters, mentioned above, in the illumination design submitted by the bidder shall not be considered & the bid shall be rejected.<br><br>(viii) Bidder shall submit LM79 test reports of (1) offered LED High bay fitting for inside Shed Area, (2) LED High Bay fitting for Platform Area & (3) LED Flood Light fitting issued by any NABL accredited laboratory only for calculation of power consumption of the design along with the bid document. |
| | Similar works means | "Supply, installation, testing and commissioning of Indoor or Outdoor Lighting" executed for Government or Public Sector Undertaking or any reputed Industrial Organization in private sector. |
| (C) | Assessed Available Bid capacity = A x N x 2 –B,<br><br>Where, "N" = Number of years prescribed for completion of the subject contract.<br><br>"A" = Maximum value of works executed in any one year during last seven years (at current price level). | |

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| | "B" = Value at current price level of existing commitments and ongoing works to be completed in the next 'N' years.<br><br>Note: For bringing value of works to current level, multiplying factor to be indicated in tender with reference to escalation based on WPI. |

| Financial Year | 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---|---|---|---|---|---|---|---|
| Index | 152.5 | 139.4 | 123.4 | 121.8 | 119.8 | 114.9 | 111.6 |
| Multiplying Factor | 1.0 | 1.09 | 1.24 | 1.25 | 1.27 | 1.33 | 1.37 |

The Bidder shall furnish statements showing the value of existing commitments and ongoing works as well as the stipulated period of completion remaining for each of the works preferably countersigned by the Nodal Office or his nominee-in charge.

IMPORTANT:

(i) The value of annual turnover is not to be considered towards "A" in the formula.
(ii) The information may be provided as per the format given at Section-IX.

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| (D) | In Case the similar work has been issued for any private body, the bidder will be required to produce the tax deducted at source (TDS) certificate indicating the income tax deducted by the client for that work, which will form the basis for assessing the value of completed work.<br><br>IMPORTANT:<br><br>(1) The particular raw in the TDS certificate (Form 16 or Form 26A), which indicates the credit of the payment received from the client, should be highlighted.<br><br>(2) Along with the TDS certificate, a declaration on the letter head of a Chartered Accountant should be submitted giving details such as the name of bidder, the name of the client for which the bidder has carried out the work, name of work, work order no. and date, gross amount of the payment, net amount received from the client, TDS amount. The statement should be signed by the Chartered Accountant.<br><br>In case any discrepancies between the TDS (Form 16 or Form 26A) and the declaration given by the Chartered Accountant with regard to payment received from the client, it should be explained. |
| (E) | The contractor shall have valid electrical contractor's license for carrying out electrical work of nature involved in this tender obtained from the competent authority of their respective states without which the tender shall not be accepted. Contractor shall submit copy of the license in lieu of the same for consideration. |

| **INSTRUCTIONS FOR UPLOADING OF SCANNED DOCUMENT ON BIDDING PORTAL** | | |
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| **Sr. No.** | **Instruction** | **Precautions** |
| 1 | There should not be any bulk scanning and | The required bidding document |

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|---|---|---|
| | uploading of all bidding documents.<br><br>For example, along with work/supply order its related documents such as completion certificate and performance certificate can be bulk scanned and uploaded by giving specific name of the documents e.g. name of client. In case along with the documents related to similar work experience, the bidder also scans and includes solvency certificate and uploads it, DPA will not be responsible for finding and tracing out the same in all the scanned documents uploaded by the bidder on (n) procure bidding portal.<br><br>Every document should be specifically named and separately uploaded for its identification. | should be scanned in high quality pdf. The scanned copy should be clear and visible.<br><br>No unrelated document should be scanned and included with the specific set of scanned document.<br><br>Every document should be specifically named and separately uploaded for its identification. |
| 2 | The document related to techno-financial criteria should invariably be scanned and uploaded on (n) procure bidding portal.<br><br>Techno-financial qualification will be done on the basis of documents uploaded on bidding portal only. | The required bidding document should be scanned in high quality pdf. The scanned copy should be clear and visible.<br><br>The scanned pdf file should invariably be given specific name for its identification e.g. turn over certificate, solvency certificate etc.<br><br>Every document should be specifically named and separately uploaded for its identification. |

4.2 All bidders shall scan and forward the following information and documents with their bids.

a. Copies of original documents defining the constitution or legal status, place of registration, and principal place of business, written power of attorney of the signatory of the Bid to commit the Bidder.

b. Total monetary value of similar works performed for each of the last seven years ending last day of month previous the one in which applications are invited.

c. Experience in works of a similar nature and size for each of the last seven years, and details of works underway or contractually committed, and Employers who may be contacted for further information on those contracts.

d. Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past three years ending 31st March of the previous financial year.

e. Duly filled Forms mentioned in Section – IV- Part – I.

f. PAN, Registration with GST, Provident Fund Authorities.

g. Valid Electrical Contractor License issued by respective State.

h. EMD: As indicated in NIT.

i. Tender fee: As indicated in NIT.

j. Information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties concerned, and disputed amount.

k. A certificate by the bidder that they have not been banned / black listed by any govt. Agency.

l. Power of attorney (dully accompanied by resolution of Board in case of company).

m. Qualifications and experience of key site management and technical personnel proposed for the contract.

n. The proposed methodology and program of work, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.

o. The completion certification should invariably mention the reference no. of work order, the date of completion and contract value.

p. The copy of the work order should also be submitted for which the bidder is submitting completion certificate.

q. In case the similar work has been executed for any private body, the bidder will be required to produce the tax deducted at source (TDS) certificate indicating the income tax deducted by the client for that work, which will form the basis for assessing the value of completed work.

r. Bidders should give an undertaking letter duly stating that the documents submitted by them in support of their credentials are genuine and DPA is at liberty to take any action against the bidder if the said documents are found to be non-genuine.

s. Bidders should give an undertaking that they will comply to the specifications of the work including terms and conditions in total without any deviation.

4.3 Even though the bidder meets the above qualifying criteria, they are subject to be disqualified if they have:

4.3.1 Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements: and/or

4.3.2 Record of poor performance such as abandoning the works, non – completion of the contract.

**5. One Bid per Bidder**

**5.1** Each bidder shall submit only one bid. A bidder who submits more than one Bid will cause all the proposals with the Bidder's participation to be disqualified and the bidder can be disqualified for bidding of any contract with DPA for a period of 03 years.

**6. Joint Venture (This Clause is modified as per Clause No. 1 of Special Conditions, Section – III):**

In case of association in the form of consortium or joint venture agreement, the members of the association shall nominate one of the members as "lead partner" for participating in the tender and signing all the documents related therewith up to signing of agreement and execution of all the contractual obligations there after (in case of award of contract). All the partners of the association must also, jointly and severally, be responsible for satisfactory execution and performance of the contract. The firms with at least 26% equity holding each are allowed to jointly meet the legibility criteria.

**7. Cost of Bidding**

**7.1** The Bidder shall bear all costs associated with the preparation and submission of its Bid and employer will in no case be responsible and liable for those costs regardless of the conduct or outcome of the bidding process.

**8. Site Visit**

8.1 The Bidder, at his own responsibility and risk is encouraged to visit and examine the site of work and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the works. The costs of visiting the site shall be at the Bidders' own expense.

**B. Bidding Documents**

**9. Content of Bidding Documents**

9.1 The set of bidding documents comprises the documents listed in the below and addenda issued in accordance with clause 9:

Invitation for Bids (NIT)

- Bid Reference No. EL/AC/2776
- NIT : Invitation for Bids
- Section I : Instruction to Bidders
- Section II : General Conditions of Contract
- Section III : Special Conditions of Contract
- Section IV : Forms of Bid
- Section V : Scope of Work & Technical Specifications
- Section VI : Bill of Quantities
- Section VII : Drawings
- SECTION VIII : Approved Make list of electrical items
- SECTION IX : Format for submitting information for bid capacity
- SECTION X : Integrity Pact Agreement

9.2 The bidding documents shall be downloaded. The documents should be completely filled and submitted through on line E – Tendering process.

9.3 The bidder is expected to examine carefully all instructions, conditions of contract, forms, terms, technical specifications, bill of quantities, in the bid document. Failure to comply with the requirements of the bid document shall be at the bidder's own risk. Bids which are not substantially responsive to the requirements of the tender documents shall be rejected.

**10. Clarifications of the Bidding Documents**

10.1 A prospective bidder requiring any clarification of the bidding documents may notify the employer in writing. The employer may respond to any request for clarification which are received within seven days prior to date of pre-bid meeting. The clarifications shall be uploaded on Website https://kpt.nprocure.com, www.deendayalport.gov.in and www.eprocure.gov.in.

10.2 **Pre–Bid meeting (This Clause is modified as per Clause No. 2 of Special Conditions, Section – III)**

10.2.1 The bidder or his official representative may attend pre-bid meeting to be held on xx/xx/2024 @ 15:00 Hrs. in the Old Board Room, A.O Building, Gandhidham. The bidders/representative of bidders who wish to attend the Pre-Bid meeting shall furnish the authority letter on the letter head of Bidder, for attending the Pre-Bid Meeting on behalf of bidder at the time of Pre-Bid Meeting.

10.2.2 The purpose of the meeting will be to clarify issues related to work and tender conditions.

10.2.3 Pre – Bid clarifications will be uploaded in https://kpt.nprocure.com, www.deendayalport.gov.in and www.eprocure.gov.in website without disclosing source of enquiry.

10.2.4 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

10.2.5 At any time prior to the deadline for submission of Bids, employer may, for any reason, whether at its own initiative or in response to a clarification sought by any prospective bidder, modify the bidding documents by amendment / addendum.

10.2.6 Those bidders who download the tender document from the website shall be solely responsible to check the web site for the amendment issued in shape of Corrigendum and/or Addendum.

## 11. Language of Bid

All documents relating to the bid shall be in the English language.

## 12. Documents comprising the Bid

The bid submitted by the bidder shall comprise the following:

**A) Technical Bid:**

(i) EMD, Tender Fees and Integrity Pact Agreement duly signed by bidder and witnesses
(ii) Qualification information in accordance to clause of **Eligibility Criteria** shall be submitted.

**B) Financial Bid:**

(i) Bill of Quantities duly filled and digitally signed by bidder.

## 13. Bid Prices

13.1 The rates and prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.

13.2 The prices shall be quoted inclusive of all Taxes, (except GST), Duties, and other incidentals charges like Transportation, Loading, Unloading, Boarding & Lodging, insurance etc. and should remain firm till completion of work.

## 14. Currencies of Bid and Payment

The unit rates and the prices shall be quoted by the bidder in Indian Rupees only.

## 15. Bid Validity

15.1 Bids shall remain valid for a period of 120 days from the date of opening of the Technical Bid. A bid valid for a shorter period shall be rejected by the employer as Non-responsive.

15.2 In exceptional circumstances, prior to expiry of the original time limit, the employer may request the bidders to extend the period of validity for additional period. The request and the bidders' responses shall be made in writing. A bidder may refuse the request for which EMD, if any, will not be forfeited.

15.3 A bidder agreeing to the request will not be permitted to modify his bid.

## 16. Bid Security

### 16.1. EARNEST MONEY DEPOSIT (EMD)

The tender shall be accompanied by Earnest Money Deposit of ₹3,13,283.00 (Rupees Three Lakh Thirteen Thousand Two Hundred Eighty-Three only) through on line transfer in PNB bank account no. 2177002100004628 - Deendayal Port Authority - (IFSC code PUNB0217700). The tender not accompanied with EMD shall not be considered & their technical and price bid will be returned un-opened. Scanned copy of RTGS no. and date of transfer may be uploaded on (n) procure website. In case of Micro and Small Enterprise (MSEs) holding valid certificate issued by any agencies/organization under The Ministry of Micro, Small and Medium Enterprises indicating the list of activity related to the subject tender as per National Industrial Classification-2008 mentioned in the table below only shall become eligible for exemption from payment of Tender fee/EMD. Such bidder shall upload the scanned copy of valid Certificate along with duly filled & signed Bid Securing Declaration (Form – 6) in preliminary bid failing which the bid shall be considered non-responsive.

| Level | Description |
|---|---|
| Section – D | ELECTRICITY, GAS, STEAM AND AIRCONDITION SUPPLY |
| Division – 35 | ELECTRICITY, GAS, STEAM AND AIRCONDITION SUPPLY |
| Group - 351 | Electric power generation, transmission and distribution |
| Class – 3510 | Electric power generation, transmission and distribution |
| Sub Class - 35109 | Collection and distribution of electric energy to households, industrial, commercial and other users n.e.c. |

**a) EMD**

(i) The EMD of successful Bidder will be refunded on submission of performance guarantee (in *Form 9)* as per the tender clause and executing the agreement (in *Form 8)* as per tender clause. The EMD of unsuccessful bidders other than L1 & L2 be refunded immediately after ranking of Bids. Earnest Money of L2 bidder shall be refunded immediately after entering into agreement with L1 and acceptance of Performance Guarantee from L1.

(ii) EMD will be refunded suo-motto without any application from the Bidders.

(iii) The EMD of successful bidder will be discharged (refunded) after he has signed the Agreement and furnished the required Performance Guarantee.

(iv) Earnest Money Deposit will not carry any interest.

**b) Bid Security i.e. EMD will be forfeited if:**

(i) The bidder withdraws the Bid after Bid opening during the bid validity;

(ii) The bidder does not accept the correction of the Bid-Price, pursuant to any arithmetic errors;

(iii) The successful Bidder fails within the specified time limit to

(a) sign the Agreement or

(b) furnish the required performance Guarantee

(iv) The bidder submits more than one bid;

(v) If L-1 bidder failed to justify the abnormal rate quoted by them or rates not quoted considering ALC/CLC rate of labour prevailing at the time of bidding, offer of the L-1 bidder shall be rejected, EMD shall be forfeited and they will be liable for debarring future tender from the DPA bidding for a period of three years.

**17. Alternative Proposals by Bidders**

17.1 Conditional offer or Alternative offers will not be considered in the process of tender evaluation.

**18. Format and Signing of Bid**

18.1 The Price Bid to be submitted on-line shall be signed digitally by a person or persons duly authorized to sign on behalf the Bidders.

**19. Amendment of Bidding Documents**

19.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by using addenda.

19.2 Any addendum thus issued shall be part of the bidding documents and shall be communicated in writing or by cable to all the purchasers of the bidding documents. Prospective bidders shall acknowledge the receipt of each addendum by cable to the Employer.

19.3 To give prospective bidders reasonable time in which to take an addendum in to account in preparing their bids, the Employer shall extend as necessary the deadline for submission of bids.

**C. <u>Submission of Bids</u>**

**20. Submission of Bids**

Bidders who wish to participate in the tender will have to procure/should have legally valid Digital Certificate, as per Information Technology Act-2000, using which they can sign their electronic bids. The bidders can procure the Digital Certificate from (n) code solutions a division of GNFC Ltd, who are licensed certifying authority by Government of India. All bids should be digitally signed. For details regarding Digital signature certificate and related matters, the bidder may contact the following address:

(n) Code Solutions,
A Division of GNFC,
301 GNFC Info tower,
Bodakdev, Ahmedabad.
Tel. 91 79 26857316/17/18
Fax: 91 79 26857321
Mobile: 9327084190 / 9898589652.
E-mail: nprocure@gnvfc.net.
Bid reference No. EL/AC/2776
Name and address of the bidder.

The accompaniments to the tender documents as described under Clause **4.2** shall be Scanned and submitted On-Line along with Tender documents. **However, *the originals/attested hard copies along with tender documents (except Price Bid),***

***signed on bottom of each page in token of acceptance of Tender Conditions*** and shall have to be forwarded subsequently so as to reach the office of EE (E) within 7 days before opening of the tenders.

The envelopes shall be addressed to:

(a) Executive Engineer (Electrical)
Deendayal Port Authority
Electrical Division,
Ground Floor,
Nirman Building,
New Kandla, Kutch.
Gujarat 370210.
(b) bear the following identification:

**"Construction of new Godowns in place of existing Godown No. 19 to 21 & 25 inside Cargo Jetty area – Electrification Work"**

Bid reference No. EL/AC/2776

Name and address of the bidder.

## 21. Deadline of Submission of the Bids

21.1 Bids must be received by the employer in On-Line System at websites https://kpt.nprocure.comnot later than 21/06/2024 up to 14:00 Hrs.

21.2 At the time of submission of the tender document, the Bidder shall give an undertaking that no changes have been made in document. The uploaded version of the Port Tender Document at https://kpt.nprocure.com websites will be treated as authentic tender and if any discrepancy is noticed at any stage between the Port's tender document and the one submitted by the Bidder, the conditions mentioned in the Port's uploaded document on https://kpt.nprocure.com websites shall prevail.

21.3 The employer may extend the deadline for submission of bids by issuing an amendment on DPA website as well as on https://kpt.nprocure.com in which case all rights and obligations of the employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

21.4 In case of tender documents being downloaded from the web site, at the time of submission of (the hard copy of) the tender document, the tenderer shall give an undertaking that no change have been made in document. Any discrepancy is noticed at any stage between the port's tender document uploaded on https://kpt.nprocure.com and the one submitted by the tenderer, the conditions mentioned in the port's tender document uploaded on https://kpt.nprocure.com shall prevail. Besides, the tenderer shall be liable for legal action for the lapses.

## 22. Late Bids

22.1 After the deadline of submission of bid, the bids cannot be submitted in the On-Line System.

## 23. Modification and Withdrawal of Bids

23.1 Bidders may modify or withdraw their bids before the deadline of submission of bid or extension if any.

23.2 No Bid can be modified after the last date for submission of Bids.

23.3 Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity including extension, if any, may result in forfeiture of EMD.

## D. Bid Opening and Evaluation

### 24. Bid Opening

24.1 On the due date and time, the employer will first open Preliminary and Technical bids of all bids received including modifications.

24.2 In the event of the specified date for Bid opening being declared a holiday by the employer, the Bids will be opened at the appointed time on the next working day at the same time.

24.3 If any Bid contains any deviation from the Bid documents and / or if the same does not contain Bid security i.e., EMD in the form of Bid security declaration form and tender fees in the manner prescribed in the Bid documents, then that Bid will be rejected and the Bidder will be informed accordingly.

24.4 The bids which are technically qualified, their financial bids will be opened. The date of opening of financial bid will be declared in the https://kpt.nprocure.com and www.deendayalport.gov.in.

24.5 The price bid i.e., BOQ will be opened only those bids qualify technically.

### 25. Clarification of Bids

25.1 To assist in the examination and comparison of Bids, the employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakup of unit rates. The request for clarification and the response shall be in writing, but no change in the price of substance of the Bid shall be sought, offered, or permitted.

25.2 No Bidder shall contact the employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded.

25.3 Any effort by the Bidder to influence the employer's bid evaluation, bid comparison or contract award decisions, may result in the rejection of his bid.

### 26. Examination of Bids and Determination of Responsiveness

26.1 Prior to detailed evaluation of Bids, the employer will determine whether each Bid

(a) Has been properly digitally signed,

(b) Meets the eligibility criteria defined

(c) Is accompanied by the required Bid Securing Declaration Form and tender fees;

(d) is responsive to the requirements of the Bidding documents.

(e) GST number to be quoted invariable by bidder.

26.2 A substantially responsive Technical and Financial Bid is one which conforms to all the terms, conditions and specification of the Bidding documents.

26.3 If a Technical Bid is not substantially responsive, it will be rejected by the employer, and may not subsequently be made responsive by correction or withdrawal of the non-confirming deviation or reservation.

**27. Evaluation and Comparison of Bids**

27.1 The employer will evaluate and compare only the Bids determined to be responsive.

27.2 In evaluating the Bids, the employer will determine for each Bid the evaluated Bid price by adjusting discounts, if any.

27.3 If in the opinion of Engineer in Charge, the rate quoted by successful bidder is abnormally high/low compared to the estimated cost of the work, the employer may ask the bidder to produce detailed price analysis for all items of the bill of quantities.

**E. Award of Contract**

**28. Award Criteria (This Clause is modified as per Clause No. 3 of Special Conditions, Section – III)**

The employer will award the work to the bidder whose bid has been evaluated to be techno-commercially responsive and the lowest evaluated amount bid subject to submission of agreement and performance security.

The employer, if so required, reserves the right to:

a) Split the work and award the work in favour of more than one firm,

b) Award the work separately as supply, execution, Operation & Maintenance/Operation/Maintenance as applicable.

**29. Employer's Right to accept any Bid and to reject any or all.**

Notwithstanding Clause 28, the Employer reserve the right to accept or reject any bid without assigning any reason and to cancel the bidding process and reject all bids, at any time prior to the award of contract, without thereby incurring and liability to the affected bidder or bidders of the grounds for Employer's action.

**30. Letter of Intent:**

The Chief Mechanical Engineer will issue the Letter of Intent (Form No. 7) intimating the successful bidder about the proposed pre-acceptance of tender.

**31. Notification of Award and Signing of Agreement**

31.1 The Bidder who's Bid has been accepted will be notified for the award by the employer prior to expiration of the Bid validity period by confirmation in writing. In this letter (hereinafter and in the Conditions of Contract called the "Letter of Intent") the contract amount, completion period of the work, etc. will be mentioned in line with the tender conditions.

31.2 The notification of award will constitute the formation of the Contract subject to the furnishing of a performance security in accordance with the provisions of tender condition.

31.3 The Agreement will be submitted by successful Bidder within 14 days (National Bid) 28 days (Global Bid) of issue of the notification of award (Letter of Intent). The agreement will incorporate all correspondence between the employer and the successful bidder.

**32. Contract Agreement:**

32.1 The agreement on stamp paper shall be furnished by the Contractor as per the following guidelines within 14 days (National Bid) 28 days (Global Bid) from the date of issue of Letter of Intent.

i) The successful Bidder will be required to execute an agreement at his expense on Three Hundred Rupees (₹300/-) Non-Judicial Stamp Paper in the proper departmental format (Form 8) for the due and proper fulfilment of the contract within 14 days (national Bid) 28 days (Global bid) from the date of Letter of Intent.

32.2 Pending preparation and execution of the contract agreement as above, the tender submitted by the Contractor together with Chief Mechanical Engineer's letter/fax accepting the tender shall constitute a binding contract between the Board and the Contractor.

32.3 The contract period shall be reckoned from the date of issue of work order to commence the work.

i) The original agreement as per the format attached with the tender should be executed on a stamp paper of appropriate value (at present ₹300/-)

ii) The Agreement should be submitted in duplicate and the date of execution is to be kept blank.

iii) Each page of the document is to be signed by the Contractor/ his authorized representative by indicating his full name.

iv) If the Contractor is a partnership firm, then a copy of the Partnership Deed and in case it is a Company, a copy of Memorandum and Articles of Association along with Registration Certificate is to be submitted.

v) If the agreement is signed by a Partner/ a Director/ an authorized person of the firm, in such case, a certified true copy of the power of attorney/ letter of authority given by the firm/ company to the signatory of the Contractor firm is to be submitted.

vi) The entire agreement should be in type written form/ computer printed form.

vii) Leaving blanks and insertion of some contents of the agreement with hand writing should be avoided.

viii) All corrections/ additions made in the agreement are to be initialled.

## 33. Performance Security

33.1 Performance Guarantee shall be 10% of the contract price, of which 5% of contract price should be submitted as Performance Guarantee in form of BG/FDR/Digital Transfer within 21 days, on receipt of Letter of Award and balance 5% to be recovered as Retention Money from Running Bills. Recovery of 5% Retention Money to commence from the First RA Bill onwards @ 5% of the Bill Value from each Bill. Retention Money will be refunded within 14 days from the date of payment of final bill. Balance SD will be refunded immediately not later than 14 days from completion of defect liability period.

33.2 Successful Bidder has to submit the Performance security @ 5% of Contract price within 21 days of receipt of Letter of Award, failing which the work will not be awarded and the Bid Security i.e., EMD will be forfeited.

33.3 The bank guarantee towards performance guarantee cum security deposit will be accepted from any nationalized bank/scheduled bank (Except co-operative bank) having its branch at Gandhidham.

33.4 The Port Authority will also be at liberty to deduct from performance guarantee or from any sums of money due or that may become due under any contract with the contractor that

may become due to the employer. This is without prejudice to the rights of the employer under the terms of the contract. The Bank Guarantee is required to be dispatched by the issuing bank directly to The Employer by Registered AD Post.

33.5 The Port Authority may at their option forfeit the Performance Guarantee cum Security Deposit if the contractor fails to carry out the work or perform or observe the conditions of contract.

33.6 The balance Performance Guarantee cum Security Deposit will be released after successful completion of guarantee period.

33.7 If applicable, the documentary evidence (copy of paid challan in government treasury) of welfare cess @1% of work done or as amended by statutory authority from time to time, paid on final bill shall be submitted before releasing the performance guarantee.

**34. Issue of Work Order**

Work order will be issued indicating the Contract value, completion period etc. after submission of Performance Security Deposit and Contract Agreement on Non-Judicial Stamp Paper by the successful bidder as per Tender Conditions.

**35. Time Schedule**

The Contract shall be effective from the date of issue of Work Order and the work shall be completed within Six (6) Months from the date of Work Order.

**36. Corrupt or Fraudulent Practices**

36.1 The employer requires that Bidders/Suppliers/Contractors under this contract, observe the highest standard of ethics during the procurement and execution of this contract. In pursuance of this policy, the employer:

(a) Defines the following for the purpose of these provisions:

(i) "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and

(ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the employer, 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 employer of the benefits of free and open competition.

(b) Will reject a proposal for award of work if he determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

(c) will declare a Bidder ineligible, either indefinitely for a stated period of time, to be awarded a contract/contracts if he at any time determines that the Bidder has engaged in corrupt or fraudulent practices in competing for or in executing, the contract.

**Signature & Seal of Contractor**

**Executive Engineer (Electrical)**
**Deendayal Port Authority**

## SECTION – II

## GENERAL CONDITIONS OF CONTRACT

## GENERAL CONDITIONS

**1. Definitions**

In the Contract (as hereinafter defined) the definition of the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:

**a.** "**Employer**" means Board of Authority of Deendayal Port (DPA) under the Major Port Authorities Act 2021, by notification issued by the Government of India, acting through its Chairman, Dy. Chairman or Chief Mechanical Engineer or any other officers so nominated by the Board.

**b.** "**Contractor"** means the person or persons, firm, corporation or company whose tender has been accepted by the employer and includes the Contractor's servants, agents and workers, personal representatives, successors and permitted assigns.

**c.** **"Contract"** means and includes Tender Documents, Instructions to Bidders, General Conditions of Contract, Drawings, Specifications, and Schedules etc., any amendments thereto, Bid, Letter of Intent, Contract Agreement and the work order.

**d.** **"Contract Price"** means the total sum of money to be paid by the employer to the contractor on timely completion of the contract work as per Contract including payment for extra work, i.e. as per defined and applicable items of the terms of payment, including any taxes, except GST, and duties to be paid to state or central Government.

**e.** **"Specifications"** means the specification referred to in the tender documents and any modifications thereof or additions thereto or amendments thereto as may be from time to time be furnished or approved in writing by the employer.

**f.** **"Chief Mechanical Engineer"** shall mean the Chief Mechanical Engineer of Deendayal Port Authority.

**g.** **"Work" or "Works"** shall mean the whole of the plant and materials to be provided and work to be done executed or carried out by the contractor under the contract.

**h.** The **"Site"** shall mean the whole of the premises, buildings and grounds in or upon which the system or works is or are to be provided, executed, erected, done or carried out.

**i.** The **"Schedule"** shall mean the schedule or Schedules attached to the specifications.

**j.** The **"Drawings"** shall mean the drawings, issued with the specification which will ordinarily be identified by being signed by the Chief Mechanical Engineer and any further drawing submitted by the contractor with his tender and duly signed by him and accepted or approved by the Chief Mechanical Engineer and all other drawings supplied or furnished by the contractors or by the Chief Mechanical Engineer in accordance with these contract conditions.

**k.** **"Trials" and "Tests"** shall mean such trials and tests as are provided for in these conditions of contract and described in the specification and shall include all other tests to be carried out as per the requirement of the 'employer'.

**l.** **"Approved" or "Approval"** shall mean approval in writing.

**m.** **"Engineer-in-charge/Nodal officer"** shall mean any officer/Engineer authorized by Chief Mechanical Engineer for purpose of this contract.

**n.** **"Day"** are calendar days, **"months"** are calendar months

**o.** **"Equipment"** is the contractor's machinery and vehicles brought temporarily to the site to construct the works.

**p.** **"Material"** are all supplies, including consumables, used by the contractor for incorporation in the works.

**q.** **"Plant"** is any integral part of the works which is to have mechanical, electrical, electronic or chemical or biological function.

**2. Use of Contract Document:**

The Contractor shall not, without prior consent, make use of any document except for the purpose of performing this contract.

**3. Change Orders:**

At any time during the execution of the contract, by a written notice to the Contractor, changes may be made in the general scope of contract. The Engineer In-charge (EIC), with due approval of competent authority, may make any changes in the quality and/or quantity of the work or any part thereof that may, in his opinion, be necessary and for that purpose the Engineer In-charge shall have the power to order the Contractor to do and the Contractor shall do any of the following:

a. Increase or decrease or split the quantity of work included in the contract,

b. Omit any such work,

c. Change the character, quality or kind of any such work,

d. Change the dimensions of any such work,

e. Change in Location

f. Execute additional work of any kind necessary for completion of the work under the contract, and no such change shall in any way vitiate or invalidate the contract but the cost, if any, arising out of all such changes shall be taken into account in ascertaining the total amount of the contract price. Where the rate is available in the contract and the same is applicable to the additional work, in the opinion of the EIC, the cost of the additional work shall be determined as per this available rate. But, if the rate for additional work is not available in the contract, the same shall be determined by the EIC taking into account the market rate and labour cost at the site for similar works and shall be final.

g. Deviations from the specifications as contained in the tender agreement including the make / model, shall not be accepted. In case of any such deviation, payment shall not be made for that part of the work / item, even if it is meeting the functional requirements and has been accepted by the purchaser. The payment for such portion of the work / item can only be released if the contractor makes good the deviations before the expiry of the warranty period so as to meet the specifications of the tender agreement in all respects.

**4. Resolution of Dispute**

a) The Board and the Contractor shall make every effort to resolve amicably by direct informal negotiations, any disagreement or dispute arising between them in connection with the contract. However, in case of failure of negotiation between the Board and the Contractor, the parties shall refer their present and future disputes relating to the contract itself or arising out of or concerning or in connection with or in consequence of the contract to the Chairman, DPA whose decision shall be final and binding on both the parties. The contract shall be governed by the Indian Contract Act, 1872.

b) Jurisdiction of Courts:

All such disputes, which could not be settled at the intervention of Chairman, DPA, shall be subjected to the jurisdiction of the Courts at Gandhidham.

**5. Force Majeure:**

5.1 In the event that the Contractor is delayed in performing its obligations in the contract, and such delay is caused by force majeure including war, civil resurrection, strikes (other than the strike solely by the Contractor's men), fire, flood, epidemics, earthquakes, extremely adverse climatic conditions, such delay may be excused and the period of such delay may be added to the time of performance of the obligations without any addition to the contract price.

5.2 If a force majeure situation arises, the Contractor shall promptly notify the Board in writing of such condition and the cause thereof, ***but not later than 7 days from its occurrence***. Unless otherwise directed by the Board in writing, the Contractor shall continue to perform its obligations under the contract as far as reasonably practicable. The Contractor shall demonstrate to the Board's satisfaction that it has used its best endeavor to avoid or overcome such causes of delay and the parties will mutually agree upon remedies to mitigate or overcome such causes of delay without having any right to any claim on account of such force majeure.

5.3 In any other situation, which is beyond the reasonable control of the Contractor in the opinion of the Engineer In-charge, and where the Contractor has promptly notified the Board in writing about such situation, it may be considered as "Force Majeure" situation.

**6. Compliance with Statutes, Regulations:**

The Contractor shall comply in all respects, with all statutes and regulations as may be necessary, including clearance from State/Central Govt. authorities, Pollution Control Boards, labour enforcement and local authorities. The Contractor shall, at all times during the continuance of the contract, so far as it may be necessary, comply with all the existing enactments including Central and State legislation as well as any by-laws of any local authorities regarding labour, particularly the Minimum wages Act, Factories Act, Workmen's Compensation Act, Employees' Provident Fund and Family Pension Fund Act, Employees' State Insurance Act, Contract Labour (Regulation and Abolition) Act, Payment of Wages Act, Maternity Benefit Act, National and Festival Holidays Act, Shop and Establishment Act, The Apprentice Act and keep DPA indemnified against any loss or claim arising out of contravention of the provisions of the above said enactments by the Contractor. The price quoted by the Contractor in the Bill of Quantity shall be deemed to include all expenses whatsoever the Contractor may be required to incur for the compliance with the provisions of the above said legislation. The Contractor shall make necessary arrangements for DPA to witness the payment made by the Contractor to his staff and labour.

7. **Payment Terms (This Clause is modified as per Clause No. 4 of Special Conditions, Section – III):**

All payments shall be made in Indian rupees unless specifically mentioned.

i. 70% of supply item rate against receipt of material at site in good condition after obtaining insurance cover as per tender condition (if TPI appointed then after inspection & certification of the same by Third Party Inspection Agency).

ii. 20% of supply item rate after completion of erection, installation, testing and commissioning, etc. (if TPI appointed then after inspection & certification of the same by Third Party Inspection Agency)

iii. 90% of item rate covers only laying/fixing/installation.

iv. Remaining 10% will be released after successful completion of whole work (if TPI appointed then after inspection & certification of the same by Third Party Inspection Agency).

**NOTE:**

The payment shall be made through RTGS /NEFT and the Contractor should be furnished following details:

Bank Payment Agreement Form

a. Name of Party
b. Account No.
c. Branch Name
d. Branch Station
e. IFSC code of the bank
f. MICR code
g. Accepted for : NEFT payment or RTGS payment

Declaration by the party

I/We hereby declare that the above information furnished by me is correct and DPA is requested to pay my / our dues to this account for this work is concerned.

Signature of the party with the seal

Declaration by the bank

It is hereby informed that the details mentioned by the party is correct as per our records and any payment made by DPA to this account will be accepted either by RTGS/NEFT.

Signature of the bank manager with the seal.

## 8. Insurance:

8.1 The contract shall provide in the joint names of the employer and the contractor, insurance cover from the start date to the end of guarantee period for the following events which are due to the contractor risk:

a) loss of or damage to the works, plan and materials

b) loss of or damage to equipment

c) loss of or damage of property (except the works, plant, materials and equipment) in connection with contract, and

d) personal injury or death

8.2 Policies and certificates for insurance shall be delivered by the contactor to the engineer in charge or his nominee before the commencement of work. All such insurances shall provide for compensation to be payable to the types and proportions of currencies required to be rectify the loss or damage incurred.

8.3 Alterations to the terms of insurance shall not be made without the approval of the engineer in charge or his nominee,

8.4 All the materials shall stand insured from the time of arrival at site till commencement of erection against fire, pilferage, damage and against natural calamities for the value of 90% of each item.

8.5 During erection and till the work is completed and satisfactory taken over by the D.P.T after testing the materials shall stand covered by suitable erection insurance also for the value of 110% of the item. The charges for the insurance shall be borne by the Contractor.

**9. Time Extensions:**

The Contractor may claim extension of the time limits in case of;

i) Changes ordered by Deendayal Port Authority.

ii) In case work is delayed on DPA's Account, i.e. due to delay in approval of drawings, non-availability of site clearance or any other reason, DPA will consider time extension of merit. However, no compensation will be paid to the Contractor if work is delayed on DPA's account. The Contractor shall submit the request for extension, within 30 days of occurrence of such delay, clearly indicating the justification for such extension.

iii) Force Majeure.

iv) All the incidents of delay should be entered in the hindrance register which will be base for granting any extension.

**10. Time is the essence of the contract:**

Time is the essence of the contract and the Contractor shall ensure that all the obligations under the contract are completed within the agreed time schedule. The Contractor shall be solely responsible for all the delays including the delays caused by its vendors. In case of delay in progress of the works, Deendayal Port Authority reserves the right to withhold the payment, cancel the contract unilaterally or complete the work departmentally.

**11. Liquidated Damages**

11.1 In case of delay in completing the contract, liquidated damages (LD) may be levied at the rate ½% of the contract value per week of delay or part thereof subject to a maximum of 10% of the contract price.

11.2 The employer, if satisfied that the works can be completed by the contractor within a reasonable time after the specified time for completion may allow further extension of time at its discretion with or without the levy of LD. In the event of extension of time at its discretion with LD the employer will be entitled without prejudice to any other right or

remedy available in that be half percent (½%) of the contract value of the works for each week or part of the week subject to the ceiling 10% of contract value.

11.3 The employer, if not satisfied that the works can be completed by the contract, and in the event of failure on the part of the contractor to complete work within further extension of time allowed as aforesaid shall be entitled without prejudice to any other right or remedy available in that behalf to rescind the contract.

11.4 The employer, if not satisfied with the progress of the contract and in the event of failure of the contract to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.

11.5 In the event of such termination of the contract as described in clauses (11.3) or (11.4) or both, the employer shall be entitled to recover LD up to ten percent (10%) of the contract value and forfeit the security deposit made by the contract besides getting the work completed by other means at the risk and cost of the contractor.

11.6 In case part/portion of the work can be commissioned and port operates the portion for commercial purpose, the rate of LD will be restricted to the uncompleted value of work, the maximum LD being on the entire contract value.

## 12. Variations

12.1 **Variation in Conditions of Contract:**

In case of any variation in Instructions to Bidders (ITB), General Conditions of Contract (GCC) and the Special Conditions of Contract – if any special conditions of contract shall prevail. But in case of any requirement/condition specified in the Scope of Work, it shall prevail over all other conditions.

12.2 **Variation in Quantities of Schedule – B:**

The overall as well as individual variations shall be ± 30% in quantity for which the rate quoted by the bidder and accepted by the employer shall be applicable.

## 13. Acceptance:

Upon completion of work under this contract, the Board may accept the works and/or services after installation, if defects or shortcomings are not considered essential and, the Contractor agrees to make good the deficiencies in confirmation with this contract. No work shall be accepted before the Contractor clears the site of scraps, unused materials, work shed, equipment and all such materials which were used for execution of the work and not required any more at the work site. Also, the Contractor has to submit all the documents and final "as built" drawings as per the contract agreement without which no work shall be treated as complete.

Completion Certificate shall be issued by the employer after satisfactory completion of work as per tender and after taking trial.

## 14. Guarantee: (This Clause is modified as per Clause No. 5 of Special Conditions, Section – III)

14.1 The warranty period shall be valid up to six/twelve months (6 months for repairs and 12 months for new works including supplied items) with effect from the date of acceptance of the work and/or services, unless otherwise specified in the scope of work/Special Conditions of Contract (SCC).

14.2 The Contractor shall warrant the Board that the goods and services under this contract will comply strictly with the contract, shall be first class in every particular case and, shall be free from defects. The Contractor shall further warrant the Board that all materials, equipment and the supplies furnished by him will be new and fit for their intended purposes.

14.3 The Board shall promptly notify the Contractor in writing of any claim arising under this Warranty. Upon receipt of such notice, the Contractor shall promptly repair or replace the defective goods and/or services at no cost to the Board.

14.4 If the Contractor, having been notified, fails to rectify the defects in accordance with the contract, the Board may proceed to take such remedial action as may be necessary, at the Contractor's risk and cost.

**15 Taxes:**

**GST Clause:**

The contractor shall quote the price exclusive of GST. The contractor shall quote prevailing GST rate separately, which shall be reimbursed by DPA after ascertaining necessary compliance as per Goods & Service Tax, 2017.

All other duties, taxes, cesses applicable if any, shall be borne by the contractor.

**Deduction of Income-Tax & GST:**

Income-Tax deductions and surcharge & GST + TDS as applicable thereon shall be made good while making payments due to the contractor for carrying out the work and only net amount shall be paid as directed by the Central Board of Direct Taxes, Ministry of Finance, Government of India.

**Tax:** The rates quoted by the contractor shall be deemed to be inclusive of the taxes, duties etc. (except GST) which the contractor will have to pay for the performance of this contract. The employer will perform such duties in regard to the deduction of such taxes at sources as per applicable law.

**16. Deduction:**

16.1 Deduction of taxes/income tax at source shall be made from the any bill of the Contractor in accordance with the prevailing rules of Govt.

16.2 While performing under the contract, the damages caused by the Contractor or his workers to any of the Port Authority property shall be promptly made good by the Contractor at his own cost. In case the Contractor fails to repair/replace the damage, Deendayal Port Authority shall have the right to take steps to make good the damages and all the cost on this account shall be recovered from the bills of the Contractor or any money due to the Contractor from this contract or any other contract or any other transaction. In determination of the damage, the opinion of the Engineer-In-charge (EIC) shall be conclusive.

16.3 Any dues arising out of failure on the part of the Contractor to carry out any obligation under the contract shall be deducted from the bills of the Contractor or from any money due to the Contractor from this contract or any other contract.

**17. Subcontracts:**

The Contractor shall not be allowed to engage any sub-contract for all or any part of this contract.

**18. Idle Charges:**

All efforts shall be made for timely supply of materials and/or equipment where it is included in the scope of Deendayal Port. However, the Contractor shall not be entitled to any idle charges for delay in supply of materials and/or equipment by the Port Authority. Further, in case of any delay due to stoppage of work ordered by the Port Authority to avoid interruption in other important activities of Port Authority or any other reason, the Contractor shall not claim any idle charges.

**19. Personal Protective Equipment: (PPE)**

The Contractor shall be solely responsible, at his own cost, for the supply of required PPE to his workers and staff and he shall also ensure the use of PPE such as helmets, nose masks, hand gloves etc. by his staff at site.

**20. Conduct:**

The Contractor, at all times during the tenure of contract, shall take all measures to prevent any unlawful, riotous or disorderly conduct by or amongst his staff at the site and for the preservation of peace and protection of persons and property at the work site as well as in the enactment of the works.

**21. Accident:**

The Contractor shall, within 24 hours of the occurrence of any accident, at or about the work site or in connection with execution of the contract, report such accidents to the Engineer-In-Charge giving all the details in writing. He shall also provide additional information about the accident as requested by the EIC.

**22. Watch and ward:**

During the execution of the contract, it shall be the responsibility of the Contractor to arrange watch and ward of the work including the raw materials, machine/equipment/system used for the work at his own cost till the date of acceptance of the work by Deendayal Port Authority.

**23. Termination:**

23.1 The Board may, without any prejudice to any other remedy for breach of contract, by written notice of default sent to the Contractor, terminate the contract in whole or in part:

(i) if the Contractor fails to execute the work within the period as specified in the contract or any extension granted by the Board;

(ii) if the Contractor fails to perform any other obligation under the contract and if the contractor does not cure the same after receipt of a notice of default, the nature of default as well as the time within which the default has to be cured by the Contractor.

23.2 In the event of Board's termination of the contract in whole or in part, the Board may execute the remaining work or procure goods similar to those undelivered by the Contractor and the Contractor shall remain liable to the Board for any excess cost for such works or goods and risks, if any.

23.3 The Board will pay the Contractor, for all the items that are completed and ready for delivery, within 30 days after termination. The payment shall be made only after all the afore-mentioned goods are supplied to and accepted by Deendayal Port Authority. The amount so decided by the Engineer-in-Charge in this regard shall be final and binding.

23.4 In case of termination of contract for default by the Contractor, the Board may not permit the Contractor to participate in any of the future tender of Deendayal Port Authority for a period decided by DPA.

23.5 The employer may terminate the contract if Contractor causes a fundamental breach of the contract.

23.6 Fundamental breaches of contract include, but shall not be limited to the following:

a) The contractor stops work for 28 days and the stoppage has not been authorized by the Engineer-in-Charge or his nominee.

b) The contractor becomes bankrupt.

c) The contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the contract data and

d) If the contractor, in the judgment of the employer has engaged in corrupt or fraudulent practices in competing for or in the executing the contract.

e) For the purpose of this paragraph: "corrupt practice" means the offering, giving receiving or soliciting of anything of value to influence the action or public officials in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the employer, and includes collusive practice. Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the employer of the benefits of free and open competition".

f) If the contract is terminated the Contractor shall stop work immediately, make the site safe and secure and leave the site as soon as reasonably possible.

g) Any material lying at site will not be removed without the prior written permission of Engineer in Charge.

**24. Arbitration Clause:**

(I) Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or any other thing whatsoever, in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders, or to the conditions or otherwise concerning the work or regarding the execution or failure to execute the same whether arising during the progress of the work or after the completion thereof as described hereinafter shall be referred to the Chairman for sole arbitration by himself or by any officer appointed by him.

(II) It will be no objection to any such appointment that the arbitrator is an employee of the Board or the Government, that he had to deal with the matters to which the contract relates and that in the course of his duties as an employee of the Board of the Government, he had expressed views on all or any of the matters in dispute or of difference.

The arbitrator, who has been dealing with the arbitration case, being transferred or vacating his office or in the event of his death or being unable to act for any reason, the Chairman then holding the office shall arbitrate himself or appoint any officer to act as arbitrator.

(III) It is also a term of this contract that no person other than the Chairman himself or any officer appointed by him shall act as arbitrator.

(IV) It is a term of this contract that only such questions and disputes as were raised during the progress of other work till its completion and not thereafter shall be referred to arbitration. However, this would not apply to the questions and disputes relating to liabilities of the parties during the guarantee period after completion of the work.

(V) It is a term of the contract that the party invoking arbitration shall give a list of disputes with amount of claim in respect of each said disputes along with the notice seeking appointment of arbitrator.

(VI) It is also a term of the contract that if the Contractor does not make any demand for appointment of arbitrator in respect of any claims/disputes in writing, as aforesaid, within 120 days of receiving the intimation from the Engineer –in-charge that the final bill is ready for payment, the claim of the Contractor shall be deemed to have been waived and absolutely barred and the Port Authority shall be discharged and released of all liabilities under the contract in respect of these claims.

(VII) It is also a term of the contract that the arbitrator shall adjudicate only such disputes/claims as referred to him by the appointing authority and give separate award against each dispute/claim referred to him. The arbitrator will be bound to give claim wise detail and speaking award and it should be supported by reasoning.

(VIII) The award of the arbitrator shall be final, conclusive and binding on all the parties to Contractor.

(IX) The arbitrators from time to time, with the consent of both the parties, enlarge the time for making & publishing the award.

(X) Arbitration shall be conducted in accordance with the provisions of Indian Arbitration Act, 1996 or any statutory modifications or enactment thereof and rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

(XI) It is also a term of the contract that if any fees are payable to the arbitrator, this shall be pied equally by both the parties.

(XII) It is also a term of a contract that the arbitration shall be deemed to have been entered on the reference on the date he issues the first notice to both the parties calling them to submit their statement of claims and counter statement of claims.

(XIII) Venue of the arbitration shall be such place as may be fixed by the arbitrator at his sole discretion.

**25. Indemnification:**

The Contractor shall indemnify, protect and defend at its own cost, Deendayal Port Authority and its agents & employees from & against any/all actions, claims, losses or damages arising out of

a. any violation by the Contractor in course of its execution of the contract of any legal provisions or any right of third parties;

b. Contractor's failure to exercise the skill and care required for satisfactory execution of the contract.

**26. Engineer-in-Charge or his nominee's Decisions**

Except where otherwise specifically stated, the Engineer-in-Charge or his nominee will decide contractual matters between the employer and the Contractor in the role representing the employer.

**27. Delegation**

The Engineer-in-Charge or his nominee may delegate any of the duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

**28. Communications**

Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act 1872).

**29. Personnel:**

29.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data to carry out the functions stated in the Schedule or other personnel approved by the Engineer-in-Charge. The Engineer-in-Charge will approve any proposed replacement of Key personnel only if their qualifications, abilities, and relevant experience are substantially equal or better than those of the personnel listed in the Schedule.

29.2 If the Engineer-in-Charge asks the Contractor to remove a person who is a member of the Contractor's staff of his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connections with the work in the Contract.

**30. Employer's Obligation**

(i) Electricity, water and land for execution of the work at site shall be provided on payment of applicable tariff of the employer subject to availability. If DPA is unable to provide electricity and water the same will be arranged by the contractor at his own cost.

(ii) The employer will not provide Port Authority Quarters, during the tenure of contract.

(iii) Administrative support only, for obtaining clearance from any statutory authority, shall be provided by the employer.

(iv) On successful completion of all the obligations under the contract and on the request of the Contractor, the employer shall issue a "Completion Certificate with the approval of the Chief Mechanical Engineer, the employer.

**31. Queries about the Technical Data**

The Engineer-in-Charge or his nominee will clarify queries on the Technical Data.

**32. Approval by the Engineer-in-Charge or his nominee.**

The Contractor shall submit the makes of material, equipment, specifications and drawings for proposed Work to the Engineer-in-Charge or his nominee, who is to approve them subject to compliance with the Technical specifications and drawings.

The Engineer-in-Charge or his nominee's approval shall not alter the Contractor's responsibility for the work.

All drawings prepared by the contractor for the work if any, are subject to prior approval by the Engineer in-Charge or his nominee before procurement/execution.

**33. Discoveries**

Anything of historical or other interest or of significant value unexpectedly discovered on the site is the property of the employer. The contractor is to notify the employer or his nominee of such discoveries and carry out the instructions of employer or his nominee for dealing with them.

**34. Access to the site**

The contractor shall allow the Engineer in charge or his nominee and any person authorized by him access to the site to any place where work in connection with the contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured, fabricated and/or assembled for the work.

**35. Instructions**

The contractor shall carry out all instructions of the engineer or his nominee which comply with applicable laws where the site is located.

**36. Safety**

The Contractor shall be responsible for the safety of all activities on the Site.

**Quality Control**

**37. Identification of Defects**

The Engineer-in-Charge or his nominee shall check the work carried out by Contractor and notify the Defects found if any. The Engineer-in-Charge or his nominee may instruct the Contractor to rectify the Defect.

**38. Correction of Defects**

38.1 The Engineer-in-Charge or his nominee shall give notice to the Contractor of any Defects before the end of the Defects Liability Period (Guarantee Period), which begins at

Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

38.2 Every time notice of a Defect is given the Contractor shall correct the notified Defect within the length of time specified by the Engineer-in-Charge or his nominee's notice.

**39. Uncorrected Defects**

If the Contractor has not corrected a Defect within the time specified, the Engineer-in-Charge or his nominee will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

**40. Employer's right of Rejection:**

The employer shall reserve the right to reject a part portion or consignment thereof within a reasonable time after actual delivery thereof at the place of destination, if consignment is not in all respects in conformity with terms & conditions of the contract whether on account of any loss, deterioration or damage before dispatch or delivery or during transit or otherwise whatsoever.

**41. Removal of Rejected goods:**

Rejected goods shall under all circumstances lay at the risk of the contractor from the moment of rejection and if such goods are not removed by the contractor within 21 days from the date of intimation from the Engineer-in-Charge. Engineer-in-Charge may either return to the contractor at the risk and cost of the contractor by such mode of transport as the Engineer-in-Charge may select or dispose of such material at the contractor's risk on his account and retain such portion of the sale proceeds as may be necessary to recover any expenses incurred in such disposals.

**42. Use of Contract Document:**

The Contractor shall not, without prior consent, make use of any document except for the purpose of performing this contract.

**43. Memorandum of Settlement:**

The Contractor shall not sign any memorandum of settlement with any agency such as Trade Unions etc. in any form at any level without the prior written permission of the employer in relation to any work under taken by him in the Port premises.

**44. Deviations:**

The bidder must read the tender document carefully and prepare the bid for submission. It is important to note that deviations, if any, must be brought out clearly in the technical offer, which shall be examined by Deendayal Port Authority. If the deviation statement submitted by the bidder does not contain any item, then it shall be construed that the bidder has accepted the same and no request from the Contractor, for any change, shall be accepted by DPA at a later stage. In any case, no change in specifications given in the tender agreement shall be permitted. However, only in unavoidable circumstances, Deendayal Port Authority may consider such requests from the Contractor, provided the Contractor submits it's request with adequate justification.

**45. Approvals:**

The Engineer-in-Charge shall give specific approval in writing within 7 Days to Contractor after written submission regarding Makes of Material to be used for the Contract and Drawings, if any to be furnished by the Contractor to Engineer-in-Charge for approval. Any corrections to be suggested by Engineer-in-Charge in drawings, the days taken for rectification in drawings shall be in account of the Contractor.

**46. Third Party Inspection (This Clause is modified as per Clause No. 6 of Special Conditions, Section – III):**

The Third Party Inspection Agency shall be arranged by DPA and cost of Third Party Inspection mentioned below shall be borne by DPA.

i. The Third Party Inspection Agency will carry out approval of drawings if any, material inspection at manufacturer's works/site, dispatch clearance from manufacturer's work, certification for releasing stage payments as per payment terms of contract for all the material as per schedule/work till taken over by DPA.

ii. The Third Party shall carry out inspection of work as per tender specification/relevant standard.

iii. The above stage payment shall be released after certifying by the third party and copy of the same shall be produced by Contractor for releasing the stage payment as per **Payment Terms.**

**47. Bar Chart:**

The Contractor shall submit a bar chart, before signing the agreement, clearly indicating the plan for timely execution of the work. The bar chart must indicate the individual activities and commencement and completion dates of each activity. The bar chart shall be used for monitoring the progress of the work.

**48. Engagement of Labour:**

The contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

**49. Police verification of Contract Labour:**

The Contractor who has been awarded the job through Work Order shall furnish necessary Police Clearance Certificate in respect of character and antecedents of all Contract Labourers engaged by them, before commencing the work at site.

This will be a part of Contractual Agreement, as entire Cargo Jetty, Oil Jetty area has been declared as **"Prohibited Area".** Contractor who would be awarded contract is required to comply with the above requirements.

Contractor shall obtain such Police Clearance Certificate from Police available against a nominal fee per Certificate and they will submit this Certificate giving Work Order reference on it, to the Office of the Engineer-in-Charge of respective Divisions, to be forwarded to Commandant, CISF which our Security Department along with request for issuance of Entry Passes.

The Contractor shall, if required by the Engineer-in-Charge, deliver to the Engineer-in-Charge a return in detail, in such form and at such intervals as the Engineer-in-Charge may prescribe, showing the staff and numbers of the several classes of labour from time to time

employed by the Contractor on the Site and such other information as the Engineer-in-Charge may require.

**a) Submission of Labour Reports by Every Fortnight:**

The contractor shall submit, by the 4th and 19th of every month, to the Engineer-in-Charge a true statement showing, in respect of the second half of the preceding month and the first half of the current month respectively.

1. The number of labourers employed by him on the work.
2. Their working hours.
3. The wages paid to them.
4. The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and
5. The number of female workers who have been allowed Maternity Benefit, according to clause 19 F and the amount paid to them, failing which, the Contractor shall be liable to pay to Government a sum not exceeding ₹200/- for each default or materially incorrect statement. The decision of the Engineer-in-Charge shall be final in deducting from any bill due to the contractor the amount levied as fine and be binding on the contractor.

**b) No Labour Below 14 Years:**

No labour below the age of 14 (fourteen) years shall be employed on the work.

**50. Registers to be maintained at site**

**1. Site order Book:**

A site order book is to be maintained by the contractor at the site. The work orders and instructions written in the site order book shall be deemed to have been legally issued to the contractor shall sign each entry in the site order book as a token of his having seen the same. The site order book shall be property of the Board and shall be handed over to the Engineer-in-charge of the work in good condition on the completion of the work or whenever required by the Engineer-in-charge or his authorized representative.

**2. Hindrance Register**

Every type of hindrance arising during the execution of work should be invariably recorded in the hindrance register. The Hindrance Register is to be maintained by the Engineer-in-Charge at the site. The contractor shall sign each entry in the hindrance Register as a token of his having seen the same. The Hindrance Register shall be property of the Board.

**51. No damage, hindrance or interference to the Port activities:**

The contractor shall be required to execute the work in such a manner as not to cause any damage, hindrance or interference to the Port activities and the work going on in the area. The contractor shall have to make good the loss at his own cost and risk all damages caused by his workmen to Port property and no extra payment shall be made to him on that account.

**52. Tools & Tackles**

All the tools, tackles, bricks, cement, ladders etc. for executing the work will have to be arranged by the contractor at his own cost. Arrangement for storing the materials, tools etc. will also have to be made by him. The EMPLOYER shall not be responsible for any theft/loss of any materials, tools, etc. stored/brought by the contractor for execution of work within the Port area.

**53. Hot work:**

In case of carrying out any hot work such as gas cutting and welding necessary regulations, prevailing at Deendayal Port Authority for such works shall be observed by the tenderer and necessary fire watch permit and No Objection Certificate shall be obtained from the concerned authorities of the port and necessary charges at the scale of rate prevailing in the port at that time shall be paid by the contractor.

**54. Indian Dock Safety Regulations:**

Necessary Indian Dock Safety Regulations for the safety purpose shall be adhered to by the contractor and he will be held responsible for any violation of the same.

**55. Electrical Supervisor Certificate (This Clause is modified as per Clause No. 7 of Special Conditions, Section – III):**

The contractor shall have valid electrical contractor's license for carrying out electrical work of nature involved in this tender obtained from the Commissioner of Electricity, Energy & Petrochemical Department, (Inspection wing), Block No. 18, 6th floor, Sector No. II, Udyog Bhavan, Gandhinagar, Government of Gujarat without which the tender shall not be accepted. Contractor shall submit certificate and copy of the license in lieu of the same for consideration. (This clause has also been included in pre-qualification criteria)

The contractor shall also have a valid Electrical Supervisor's certificate of competency, issued from the Commissioner of Electricity, Energy & Petrochemical Department, (Inspection wing), Block No. 18, 6$^{th}$ floor, Sector No. II, Udyog Bhavan, Gandhinagar, Government of Gujarat or equivalent authority from the other states/central Govt.

**56. Action where no Specifications are specified:**

The work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in- Charge.

**57. Undertaking by the Contractor:**

Having understood all the terms and conditions of the tender document and having assessed the site conditions, we hereby confirm that the price offered by us is a firm price and includes all the taxes (excluding GST), duties, fees, Cess etc. and all incidental charges.

**58. Labour License**:

The contractor will have to obtain necessary License from Assistant Labour Commissioner (ALC), Gopalpuri, Gandhidham (Kutch), in case he is engaging ten or more workers on any day during execution of work.

**59. Fraudulent documentation by bidders:**

Submission of fraudulent documents shall be treated as major violation of the tender procedure and in such cases the Port shall resort to forfeiture of EMD, if any/SD/BG of the bidder, apart from blacklisting the firm for the next 3 years.

**60.** If applicable, the contractor shall be registered under the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.

**Signature & Seal of Contractor**

**Executive Engineer (Electrical)**
**Deendayal Port Authority**

## SECTION – III

## SPECIAL CONDITIONS

**(These special conditions will supersede the General Condition and ITB wherever applicable)**

1. Clause No. 6 of Instructions to Bidders (ITB), Section – I is not applicable.

2. Clause No. 10.2 of Instructions to Bidders (ITB), Section – I is not applicable.

3. **Clause No. 28 of Instructions to Bidders (ITB), Section – I is modified and shall be read as under**:

The employer will award the work to the bidder whose bid has been evaluated to be techno – commercially responsive and the lowest evaluated amount bid as per the following Power Loading Criteria subject to submission of agreement and performance security.

**Evaluation of Price Bid:**

The DPA do not bind itself to accept the lowest or any tender and reserve the right to accept any tender in part or to reject any tender without assigning any reason thereof. However, DPA reserves the right to reject any or all bids without assigning any reason thereof. Decision of DPA in deciding total amount of financial loading shall be final and binding upon the bidder and DPA will under no obligation to disclose or share working with the bidder.

(1) Financial evaluation of technically qualified bids shall be done as per the following:

(a) The Power Consumption of the (i) LED High Bay fitting for inside Shed Area, (ii) LED High bay fitting for Platform Area & (iii) LED Flood Light fitting, offered by each of the technically qualified bids, as measured & certified in the LM79 test reports submitted in the bid issued by any NABL accredited laboratory only will be considered for calculating the Input power for that Bid.

Input Power for a Bid = {Power consumption of LED High bay fitting for inside Shed Area × 330 i.e., Total Quantity of the High bay fitting} + {Power consumption of LED High bay fitting for Platform Area × 252 i.e., Total Quantity of the High bay fitting} + {Power consumption of LED Flood Light fitting × 63 i.e., Total Quantity of the Flood Light fitting}

(b) Input Power of the Bid having the lowest Input Power value shall form the "Base" of the power loading calculations.

(c) The difference in Input Power for a Bid with respect to the "Base" shall be calculated for each technically qualified Bid. The expenditure cost on account of extra energy consumption due to difference in Input Power shall be loaded for each technically qualified bid as below:

**Extra Energy Expenditure Cost = Difference in Input Power with respect to Base (kW) X 12 hours X 365 days X 5 years X ₹5.55 (Prevailing tariff at DPA)**

(For example, if there are 3 technically qualified bids having input power of 80kW, 90kW and 100kW respectively then 80kW shall become the Base. The prices of the bids having input powers 90kW and 100kW shall be loaded considering a difference in Input Power of 10kW and 20kW respectively).

(d) This extra energy expenditure cost due to difference in Input Power for each Bid shall be added to the price bid of that Bid to arrive at Final Evaluated Price.

**Final evaluated price of the Bid = Amount quoted in the Price Bid + Extra Energy Expenditure cost.**

(e) This Final Evaluated Price bid by each Bidder shall be considered for evaluating the Lowest Offer.

4. The Clause No. 7 of General Condition of Contract (GCC), Section – II is modified and shall be read as under:

**Payment Terms:**

All payments shall be made in Indian rupees unless specifically mentioned.

(1) 70% payment (subject to deductions as per tender conditions) will be released after receipt of material at site in good condition, after obtaining insurance cover as per tender condition (If TPI appointed then after inspection & certification of the same by Third Party Inspection Agency) and after inspection & acceptance of material by DPA.

(2) 20% of item rate (subject to deductions as per tender conditions) after completion of erection, installation, testing and commissioning etc. and 90% of item rate for item covers only laying/fixing/removal etc. (If TPI appointed then after inspection & certification of the same by Third Party Inspection Agency).

(3) 10% (subject to deductions as per tender conditions) will be released after successful completion of whole work (If TPI appointed then after inspection & certification of the same by Third Party Inspection Agency) and handing over to DPA.

(4) The payment from 2nd bill to pre-final bill, shall be released, subject to the condition that the documentary evidence (copy of paid challan in government treasury) of the welfare cess @ 1% of work done or as amended by statutory authority from time to time, paid to concerned authority is submitted for the previous bill.

**NOTE**:

The payment shall be made through RTGS /NEFT and the Contractor should be furnished following details:
Bank Payment Agreement Form

(a) Name of Party

(b) Account No.

(c) Branch Name

(d) Branch Station

(e) IFSC code of the Bank

(f) MICR No.

(g) Accepted for: NEFT payment or RTGS payment

Declaration by the party

I/We hereby declare that the above information furnished by me is correct and DPA is requested to pay my / our dues to this account for this work is concerned.

Signature of the party with the seal

Declaration by the bank

It is here by informed that the details mentioned by the party is correct as per our records and any payment made by DPA to this account will be accepted either by RTGS/NEFT.

Signature of the bank manager with the seal

5. The Clause No. 14 of General Condition of Contract (GCC), Section – II is modified and

shall be read as under:

**Guarantee**:

The guarantee period shall be for a period of one year from the date of handing over of entire work except for LED High Bay & LED Flood Light fittings for which a warranty period of 5 years is specified as per the technical specification of the material.

The Contractor shall give guarantee to the Board that the goods and services under this contract will comply strictly with the contract, shall be first class in every particular case and, shall be free from defects. The Contractor shall further give guarantee to the Board that all materials, equipment and the supplies furnished by him will be new and fit for their intended purposes.

The Board shall promptly notify the Contractor in writing of any claim arising under this guarantee. Upon receipt of such notice, the Contractor shall promptly repair or replace the defective goods and/or services at no cost to the Board.

If the Contractor, having been notified, fails to rectify the defects in accordance with the contract, the Board may proceed to take such remedial action as may be necessary, at the Contractor's risk and cost.

6. The Clause No. 46 of General Conditions of Contract (GCC), Section – II is modified and shall be read as under:

The following clause is added at para (iv) of Clause 46 Third Party Inspection as under:

(a) The LED High Bay fitting & LED Flood Light fitting shall be inspected in accordance with the Technical Specifications before dispatch by the Third Party Inspection Agency (TPIA) engaged by Deendayal Port Authority at manufacturer's site. The LM79 test shall be conducted by the Contractor in any NABL accredited Laboratory on any one each of LED High bay for inside Shed area, LED High bay for Platform area & LED Flood light fitting randomly selected by TPIA & the same shall be witnessed by the TPIA. The cost of the testing shall be deemed to be included in the price quoted by the contractor and no separate charges shall be paid by DPA. The contractor has to submit details of LED chip manufacturer, batch number and bin number of the LED chips being used for manufacturing of LED Fittings.

(b) The contractor shall have to give 7 days' notice period for the purpose of the inspection/testing by TPIA of DPA. Under no circumstances the LED fittings shall be dispatched to site without pre-dispatch inspection/testing by TPIA of DPA failing which it will be at the sole cost and risk of the contractor.

7. The Clause no. 55 of General Conditions of Contract (GCC), Section – II is modified and shall be read as under:

The contractor shall have valid electrical contractor's license for carrying out electrical work of nature involved in this tender obtained from the competent authority of their respective states without which the tender shall not be accepted. Contractor shall submit copy of the license in lieu of the same for consideration.

8. **Integrity Pact:**

The "Procedure for signing Integrity Pact" is as follow:

(1) The Employer / Authorized Person of Employer has signed the IP in the presence of a witness from their side, who has also affixed his/her signature thereof and then the same IP has been uploaded on n-procure portal;

(2) The potential bidders shall download and print the IP Agreement signed by the Employer and their witness and affix his/her signature on the IP Agreement in the presence of a witness from his/her side, who shall also affix his / her signature thereof. Having completed the signing procedure, the Potential Bidder shall upload the duly filled and signed IP Agreement on n-procure portal.

(3) The procedure mentioned above regarding signing of Integrity Pact Agreement by both the parties (Employer and Potential bidders) shall be completed online. However, in case of any technical glitch due to which if any potential bidder is unable to upload the IP Agreement, then he / she shall submit the Hard Copy of the duly filled, signed IP Agreement to the Department concerned of DPA within a period of seven days and prior to opening of the Technical Bid, failing which Bid of potential Bidder shall be treated as disqualified.

9. The rates shall be inclusive of all taxes duties payable by them (except GST). Income tax at prevailing rates and surcharge as applicable thereon shall be deducted at source by DEENDAYAL PORT AUTHORITY in accordance with Income Tax act in accordance with instruction issued by TAX Authorities on this behalf from time to time for this TDS will be given. The deduction of TDS @2% under GST act shall be made.

The TDS under GST Act is required to be deducted @2% (1% CGST and 1% SGST or 2% IGST) from payment / credit given to contractors / professionals and others for the work order /contracts exceeding Rs.2,50,000.00/-.

Contractor / service provider / supplier etc. has to ensure timely and proper filling of GSTR 1 so that DPA can avail input tax credit in timely manner. In case DPT not allowed input tax credit due to failure on part of the contractor / service provider / supplier etc., it will be a financial loss to the DPA and therefore same shall be recovered from the payment / deposit of the contractor / service provider / supplier etc.

10. The contractor shall be registered under the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.

11. The contractor shall supply the materials of only the particular brands/make specified in the tender. If none of the make/brands are available in the market, then the department will accept the equivalent make/brand subject to the contractor producing a letter of non-availability from the manufacturer only. The EIC will ascertain the veracity of that letter directly from the manufacture. Such material will be accepted after obtaining the approval of the authority who approved the tender.

12. The Contractor shall carry out field test for the illumination level provided for Dome shaped storage sheds in the presence of Engineer-in-Charge & TPIA. The lux level measurement shall be done by Third Party Inspection Agency (TPIA) (to be engaged & payment shall be made by DPA).

13. In the event of illumination levels not found as per the requirement at both locations or either at inside Shed I & II or at Platform area, the contractor shall have to carry out the work by replacing the LED fittings installed with other wattage and/or make of LEDs, at the same locations where hangers are provided for the LED fittings, at his own cost to complete the work within the stipulated time and as per the requirement. Moreover, the contractor shall pay compensation to the Deendayal Port Authority for the assessed additional power consumption at an applicable Energy Charges per Unit as per the tariff order for DPA (The present tariff of Energy Charges is ₹5.55 per Unit). Deendayal Port Authority shall not pay anything extra to contractor to achieve the required illumination level. The compensation on account of extra energy consumption shall be calculated as below:

Compensation on account of extra energy consumption = Additional Power of LED High bay Fitting (kW) × 12 hours × 365 days × 5 years × Energy Charges per Unit as per the tariff order

for DPA.

14. The contractor shall install a Display Board at site of work indicating the details of the work such as name of the work, name of contractor, scheduled date of start & completion of work, value of work etc. at his own cost.

**Signature & Seal of Contractor**

**Executive Engineer (E)**
**Deendayal Port Authority**

# SECTION IV

## FORMS OF BID

### PART – I

### To be submitted by Bidders with their Bids

| Form No. | Name of forms/format |
|---|---|
| 1 | Form of application |
| 2 | Pre-qualification of bidders |
| 3 | Format for declaration |
| 4 | Letter of authority for submission of bid |
| 5 | Exceptions & Deviations |
| 6 | Bid Securing Declaration Form |

### PART – II

### To be used by successful Bidder

| Form No. | Name of forms/format |
|---|---|
| 7 | Letter of intent |
| 8 | Agreement form |
| 9 | Specimen bank guarantee of Performance Guarantee/Security Deposit |
| 10 | Letter of authority from bank for all BGs |
| 11 | Format of Extensions (Part – I) |
| 12 | Format of Extension (Part-II) |

**Form – 1**

## SPECIMEN OF APPLICATION

(To be executed on bidder's letter head)

The Superintending Engineer (Electrical)

Deendayal Port Authority

(Address _____)

Pin Code: _____

Dist. Kachchh (Gujarat)

We, the undersigned, declare that:

(a) We have examined and have no reservations to the tender documents, including addenda and clarifications issued vide **.....**

(b) We offer to execute the work in conformity with the tendering documents and in accordance with the delivery schedules specified in the schedule of requirements in accordance with the tender document bearing no. **(EL/AC/2776)**

(c) Our tender shall be valid for the period of 120 days**,** from the date fixed for the tender submission deadline and it shall remain binding upon us and may be accepted at any time before the expiration of that period or any extended period.

(d) If our tender is accepted, we commit to submit a performance guarantee for the due performance of the contract, as specified in specimen form for the purpose.

(e) No Joint Venture / Joint Venture.

(f) Our firm, its affiliates or subsidiaries- including any subcontractors or contractors for any part of the contract – has not been declared ineligible by the port, under laws of India or official regulations.

(g) We understand that this tender, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract agreement is prepared and executed.

i. We understand that you are not bound to accept the lowest evaluated tender or any other tender or you can also split the work that you may receive.

ii. We also make a specific note clause of [ITB, NIT] under which the contract is governed.

Signed: [insert signature of person whose name and capacity are shown]

In the capacity of [insert legal capacity of person signing the form of tender]

Name: [insert complete name of person signing the form of tender]

Duly authorized to sign the tender for and on behalf of: [insert complete name of tenderer]

Dated on_____ day of _____, _____(insert date of signing)

**Form – 2**

**Specimen format for Pre-qualification of bidders**

The information to be filled in by the bidder in the following pages will be used for purposes of pre-qualification as provided for in the instructions to Tenderer.

**1. Only for individual bidders**

1.1 Constitution of legal status of Bidder (Attach copy)

- Place of registration:
- Principal place of business:
- (power of attorney of signatory of Bid (Attach):

**2. Turnover of the Firm**

| Description | Year | Turn over |
|---|---|---|
| (insert the year as per PQC) i.e. last three financial years ending 31st march of the previous year | 2020-21 | |
| | 2021-22 | |
| | 2022-23 | |

Attachment: financial reports for the last three years: balance sheet, profit and loss statements, auditor's reports (in case of companies/corporation) etc. List them below and attach copies.

Attested Copy of Annual Turnover during Last Three Year Ending on **March 2023**

**3. Similar works**

| Particulars | Year | No. of Woks | Value |
|---|---|---|---|
| Total value of completed Similar work as defined in the tender document during last 07 years. | 2017-18 | | |
| | 2018-19 | | |
| | 2019-20 | | |
| | 2020-21 | | |
| | 2021-22 | | |
| | 2022-23 | | |
| | 2023-24 | | |

Attachments: Supporting documents, viz., Successful completion certificate from clients, other documentations to substantiate the similarity of work as per definition of "Similar Work". Employer reserves the right to verify the information.

**4.** Information on bid capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.

(A) Existing commitments and on-going works.

| Description of work | Place & State | Contract No. & Date | Name & Address of Port or Dept. | Value of Contract in Rs. | Stipulated Period of Completion | Value of remaining to be completed | Anticipated date of completion |
|---|---|---|---|---|---|---|---|

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

(B) Works for which bids already submitted

| Description of work | Place & State | Name & Address of Port or Dept. | Value of Contract in Rs. | Stipulated Period of Completion | Date when decision is expected | Remarks if any |
|---|---|---|---|---|---|---|
| **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| | | | | | | |

Attach attested certificates.

**5. Information on litigation history in which the bidder is involved**

| Other party(ies) | Port | Cause of dispute | Amount | Remark involved showing present status. |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

**6. Additional information bidder may like to submit**

Duly authorized to sign this authorization on behalf of: (insert complete name of Tenderer)

Dated on _____ day of _____, _____ (insert date of signing)

**Form – 3**

**SPECIMEN FORMAT FOR DECLARATION**

(To be executed on bidder's Letter Head)

To. _____

(Project title)

Ref: _____

The undersigned, having studied the pre-qualification submission for the above mentioned project, hereby states:

(a) The information furnished in our bid is true and accurate to the best of my knowledge.

(b) That, in case of being pre-qualified, we acknowledge that the Employer may invite us to participate in due time for the opening of Price bid of the Tender on the basis of provisions made in the Tender Documents to follow.

(c) When the call for Tenders is issued, if the legal, technical or financial conditions, or the contractual capacity of the firm changes, we commit ourselves to inform you and acknowledge your sole right to review the pre-qualification made.

(d) We enclose all the required pre-qualification data format and all other documents and supplementary information required for the pre-qualification evaluation.

(e) We also state that no changes have been made by us in the downloaded tender formats and understand that in the event of any discrepancies observed, the tender hoisted on website of procure is full and final for all legal/contractual obligations.

(f) We also declare that, our firm has not been banned / de-listed by any government or PSUs**.**

(g) We also give an undertaking that, we have not made any payment or illegal gratification to any person / authority connected with the bid process so as to influence the bid process and have not committed any offence under the PC Act in connection with the bid.

Date: _____Place: _____

Name of Applicant: _____
Represented by (Name & capacity) _____

**Form – 4**

**SPECIMEN LETTER OF AUTHORITY FOR**

**SUBMISSION OF BID**

(To be executed on ₹300/- non Judicial Stamp Paper)

To

The

Dear Sir,

We---------- do hereby confirm that Shri ……. (Name, designation and Address) is/are authorized to represent us to bid, negotiate and conclude the agreement on our behalf with you {copy of board resolution attached (in case of company)} for tender no. ---------- for the work of _____ and his specimen signature is appended here to.

We confirm that we shall be bound by all and whatsoever our said signatory shall commit.

We understand that the communication made with him by the employer/Board shall be deemed to have been done with us in respect of this Tender.

[*Specimen signature]*

Yours faithfully,

Signature:

Name & Designation:

For & on behalf of:

**Form – 5**

## EXCEPTIONS AND DEVIATIONS

As pointed out in the Tender Call Notice, Bidder may stipulate here exceptions and deviations to the bid conditions, if considered unavoidable.

| Sr. No. | Page No. of Bid Document | Clause No. of Bid Document | Subject Deviation |
|---|---|---|---|
| | | | |

Note: however, the Bidders may note that unacceptable deviations, if any, the bid shall be liable for rejection. Bidder is discouraged to deviate from bid conditions, specifications, delivery schedules, and commercial terms as per the tender document.

Duly authorized to sign this authorization on behalf of: [insert complete name of Tenderer]

Date on _____day of _____, _____ [insert date of signing]

**Form – 6**

**(Applicable for MSE's)**

**FORMAT FOR BID SECURING DECLARATION**

(To be executed on bidder's Letter Head)

Bid Security Declaration Form

Tender No. EL/AC/2776 Date: __ /__ /2024

To (insert complete name and address of the Employer/ Purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of **three** year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)

in the capacity of (insert legal capacity of person signing the Bid Securing Declaration)

Name: (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)

Corporate Seal (where appropriate)

**Form – 7**

## LETTER OF INTENT FORMAT

No: _____ Date: _____

To_____

(Name and Address of the Contractor)

Sub: Tender No. EL/AC/2776

(Name of Work)

Ref: Your bid dated

And (list the correspondence with the Bidder)

Dear Sirs,

With reference to your above offer and subsequent correspondences on the subject, we are pleased to inform you that your offer has been accepted by the competent authority and you are hereby requested to initiate actions for fulfilment of all necessary formalities, as indicated in the tender document for the above said work, at the earliest.

The Engineer-in-Charge for this work shall be Mr._____. Agreed Schedule date of commencement of the work is _____ and Schedule date of completion of the work is _____. Total Contract Price is ₹_____.

You are requested to sign the Agreement and fulfil other formalities as per the Tender conditions.

**Yours Faithfully,**

**(Signature of the controlling Officer)**

**Chief Mechanical Engineer**
**Deendayal Port Authority**

**Form – 8**

## SPECIMEN CONTRACT AGREEMENT

(To be executed on ₹300.00 non-judicial stamp paper)

[The successful tenders shall fill in this form in Accordance with the instructions indicated]

This agreement made of this _____ day of _____ Two Thousand between the Board of Deendayal Port Authority incorporated by the Major Port Authority Act, 2021 having its Administration Office Building at Gandhidham (Kutch) (hereinafter called the 'Board' which expression shall unless excluded by or repugnant to the context , be deemed to include their successors in office) of the one part and _____ (Name and address of all the partners if a partnership with all their address) hereinafter called the 'Contractor' which expression shall unless excluded by or repugnant to the context be deemed to include his / their heirs, executors, administration, representatives and assignees or successors in office of the other part.

WHERAS the Board is desirous to carrying out the work of _____ _____ And whereas the Contractor has offered to execute and complete such work.

WHERAS the Contractor has deposited a sum of Rs. _____ (Rupees _____ only) as security deposit in the form of _____ Bank Guarantee/Demand Draft

NOW THIS AGREEMENT WITHINESS AS FOLLOWS:

1. In this agreement words and expression shall have the same meaning as are respectively assigned to them in the general condition (including special conditions, if any) of contract hereinafter referred to.

2. The following documents shall be deemed to form and read as construed part of this agreement viz.:

i) Notice inviting tender.

ii) Technical specifications.

iii) Special conditions of contract.

iv) Tender submitted by the Contractor.

v) The Board's "Drawing".

vi) The schedule items of work with quantities and rates.

vii) Any correspondence made between the Superintending Engineer (E) and the Contractor after opening of the cover – I as regards to contain clarifications/details called for vice versa.

viii) Common terms and conditions offered to Contractor and their acceptance including confirmation to withdrawal of their own terms and conditions offered with the tender i.e. 'Cover – I'.

ix) Bank Guarantee for security deposit.

3. The Contractor hereby covenants with the Board to complete the work of _____ in conformity in all respects, with the provisions of the contract.

4. The Board hereby covenants to pay the Contractor in consideration of such completion of the works, the contact price of ₹_____ (Rupees _____ only) at the time and in the manner prescribed of the contract.

IN WITHNESS WHERE of the parties here unto have set their hands and seals the day and year first above written signed and sealed by the Contractor in the presence of:

Witness

1. Name & Address_____ Signature of Contractor

Seal

2. Name & Address_____

Seal

Signed, sealed and delivered by Shri _____on behalf of the Board in presence of

1. _____

2. _____ (Chief Mechanical Engineer)
Deendayal Port Authority

The common seal of the Board of Authorityees of Deendayal Port of Kandla affixed in the presence of:

1. _____ Secretary
2._____ Deendayal Port Authority

**Form – 9**

**SPECIMEN BANK GURANTEE TOWARDS PERFORMANCE**

**GUARANTEE/SECURITY DEPOSIT**

(To be executed on ₹300/- non-judicial Stamp Paper)

To,

The Board of Authorityees of Deendayal Port of Kandla,

Deendayal Port Authority

A.O.Building, P.O. Box No. 50,

Gandhidham – Kutch.

1. In consideration of the Board of Deendayal Port Authority incorporated by the Major Port Authority Act, 2021 (hereinafter called "The Board" which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include the Board of Deendayal Port Authority, its successors and assigns) having agreed to exempt _____ (hereinafter called the "contractor") (Name of the contractor/s) from the demand under the terms and condition of the contract, vide _____(Name of the Department)'s letter No._____ Date _____ made between the contractors and the Board for execution of _____covered under Tender No. _____ dated _____ (hereinafter called "the said contract") for the payment of Security Deposit in cash or Lodgment of Government Promissory Loan Notes for the due fulfillment by the said contractors of the terms and condition of the said contract, on production of a bank Guarantee for Rs. _____ (Rupees_____) only we, the (Name of the Bank and Address) _____hereinafter referred to as "the Bank") at the request of the contractors do hereby undertake to pay to the Board an amount not exceeding Rs. _____ (Rupees_____) only against any loss or damage caused to or suffered by the Board by reason of any breach by the contractors of any of the terms and conditions of the said contract.

2. We, _____(Name of Bank) (Name of Branch), do hereby Undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the Board starting that the amount claimed is due by way of loss or damage caused to or which would be caused to or suffered by the Board by reason of the contractors failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to any amount not exceeding Rs. _____ (Rupees_____) only.

3. We, _____(Name of Bank and Branch), undertake to pay to the Board any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

4. We, _____(Name of Bank and Branch), further agree with the Board that the guarantee herein contained shall remain in full force and effect during the period that would be taken for performance of the said contract and that it shall continue to be enforceable till all the dues of the Board under or by virtue of the said contract have been fully paid and its claims

satisfied or discharged or till the _____ (Name of the user department) of the said certifies that the terms and conditions of the said contract have been fully and properly carried out by the said Contractors and accordingly discharge this guarantee. PROVIDED HOWEVER that the Bank shall at the request of the Board but at the cost of the Contractors, renew or extend this guarantee for such further period or periods as the Board may require from time to time.

5. We,_____ (Name of Bank and Branch), further agree with the Board that the Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend the time of performance by the said contract or to extend the time of performance by the said Contractors from time to time or to postpone for any time or from time to time any of the powers exercisable by the board against the said Contractors and to forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extensions being granted to the contractors or for any forbearance, act or omission on the part of the Board or any indulgence shown by the board to the Contractors or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. It is also hereby agreed that the Courts in [insert city] would have exclusive jurisdiction in respect of claims, if any, under this Guarantee.

8. We, _____ Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Board in writing.

9. Notwithstanding anything contained herein:

(a) Our liability under this Bank Guarantee shall not exceed Rs. _____ (Rupees_____only);

(b) This Bank Guarantee shall be valid upto _____ ; and

(c) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____ (date of expiry of Guarantee)."

10. (i) Name of Beneficiary's Bank is State Bank of India, Gandhidham.

(ii) IFSC No. of Beneficiary's Bank is SBIN0060239.

(iii) Bank Account No. of Beneficiary is 10316591671.

Date _____ day of _____ 2024

For (Name of Bank)
(Name)
Signature

**Form – 10**

**SPECIMEN LETTER OF AUTHORITY FROM BANK**
**FOR ALL BGs**
(To be executed on Bank's Letter Head)

Date:

To,

The Board of Authority of Deendayal Port

Dear Sir,

Sub: Our Bank Guarantee No._____ dated_____ for ₹_____ favoring yourselves issued on a/c of M/s._____ (Name of contractor)

We confirm having issued the above mentioned guarantee favoring yourselves, issued on account of M/s. _____validity for expiry upto date_____and claim expiry date up to_____ We also confirm 1) _____ 2) _____ is/are empowered to sign such Bank Guarantee on behalf of the Bank and his/their signatures is/are binding on the Bank.

Name of signature of Bank Officer

**Form – 11**

**Deendayal Port Authority**

**Form of application by the Contractor for seeking extension of time**

**Part – 1**

1. Name of Contractor
2. Name of work as given in the agreement
3. Agreement No.
4. Estimated amount put to tender
5. Date of commencement of work as per agreement
6. Period allowed for completion of work as per agreement
7. Date of completion stipulated in agreement
8. Period for which extension of time has been given previously:
   (a) 1st extension vide EE's No. Dated Month Days
   (b) 2nd extension vide EE's No. Dated Month Days
   (c) 3rd extension vide EE's No. Dated Month Days
   (d) 4th extension vide EE's No. Dated Month Days
   Total extension previously given.
9. Reasons for which extensions have been previously given (Copies of the previous application should be attached)
10. Period for which extension is applied for
11. Hindrance on account of which extension is applied for with dates on which hindrances occurred and the period for which these are likely to last.
    (a) Serial No.
    (b) Nature of hindrance
    (c) Date of Occurrence
    (d) Period for which it is likely to last
    (e) Period for which extension required for this particular hindrance
    (f) Overlapping period if any, with reference to item……
    (g) Net extension applied for
    (h) Remarks, if any.
    Total period on account of hindrance mentioned above……
    Month……Days
12. Extension of time required for extra work
13. Details of extra work and amount involved:
    (a) Total value of extra work
    (b) Proportionate period of extension of time based on estimated amount put to tender on account of extra work.
14. Total extension of time required for 11 & 12

Submitted to the Sub-Divisional Officer…….

**Signature of Contractor**

Date: _____

**Form – 12**

**Deendayal Port Authority**

**APPLICATION FOR EXTENSION OF TIME**

**PART II**

**(To be filled in by the Sub-Divisional Office)**

1. Date of receipt of application from …… Contractor for the work of…….... in the Sub-Divisional Office.
2. Acknowledgement issued by S.D.O. vide his No.…… dated …
3. Remarks of S.D.O.

   (on the reasons given by the contractor are correct and what extension, if any, is recommended by him. If he has not recommended the extension, reasons for rejections should be given.)

Signature of Divisional Officer

Date:

**(To be filled in by the Executive Engineer)**

1. Date of receipt in the Divisional Office.
2. Executive Engineers remarks regarding hindrances mentioned by the Contractor.
   (1) Serial No.
   (2) Nature of hindrance
   (3) Date of occurrence
   (4) Period for which hindrance is likely to last
   (5) Extension of time applied for by the contractor
   (6) Overlapping period, if any, giving reference to Items which overlap.
   (7) Net period for which extension is recommended
   (8) Remarks as to why the hindrance occurred And justification for extension recommended.
3. Executive Engineer's recommendations:

   (The present progress of the work should be stated and whether the work is likely to be completed by the date up to which extension has been applied for. If extension of time is not recommended, what compensation is proposed to be levied under clause 2 of the agreement?)

Signature of Executive Engineer

Date

Dy. HOD/SE's recommendations

Signature of Superintending Engineer

Date

HOD's recommendations/approval.

Signature of Chief Mechanical Engineer

Date

## SECTION V

## SCOPE OF WORK

Deendayal Port Authority (DPA) is one of the Major Port in India. The Specification is intended to cover the Electrification work for Dome Shaped Godowns (size: 750mx30m & 402mx30m) inside Cargo jetty area at Deendayal Port. The work will be carried out simultaneously with Civil work. The scope of work consists of Supply, installation, testing & commissioning of HT RMU Panel, Distribution Transformer, LT Power Distribution Panels, LT Load Point Panels, LT Power Distribution Boards, LED High Bay Fittings for inside Shed Area, LED High Bay Fittings for Platform Area & LED Flood Light Fittings, Supply & laying of HT & LT XLPE insulated aluminium conductor Cables and Supply & laying of LT XLPE insulated Copper Conductor Cable. The work shall be executed to the satisfaction of the Engineer in-Charge. The contractor shall arrange all types of tools, tackles, scaffoldings, temporary power supply at his own cost for installation, testing & commissioning of the work. The contractor shall submit layout colored drawing of complete of wiring, installation & distribution in two set hard copy & soft copy after completion of work.

## TECHNICAL SPECIFICATION

**Technical Specification No. 1:**

The Gas insulated RMU switchgear shall comply with the requirement stated in the following standard & specification amended up to date.

| | |
|---|---|
| Metal Enclosed Switchgear | IEC 62271-200/<br>IEC20 298/IS 12729:1988 |
| Medium Voltage Switch | IEC 265 |
| Alternation Current Dis-connector (Load Break Isolator & Earthing switch) | IEC 60129/ IEC 62271 - 102/<br>IS 9921 |
| Specification of Alternation Current Breakers | IEC 62271-100/IEC/60056/IS:13118:1991 |
| Panel Design , SF-6 Circuit Breakers | IEC 62271-1/IEC 60694 |
| Current Transformer | IEC 60044-1/IEC 60185/IS 2705:1992 |
| HV switches | IEC 60265/IS 19920:1981 |
| Filling of SF-6 in RMU | IEC 376 |
| Pressure of SF6 gas | 1.4 bars at 20 °C |
| Cable bushings | DIN 47636 |
| Temperature class | -25 °C - +40 °C Indoor |
| Degree of Protection:<br>- SF6 tank: IP 67<br>- Front cover: IP 2X<br>- Cable cover: | IEC 60273/IS 13947 (P-1)<br>IP 67<br>IP 2X<br>IP 3X |
| Bus bars | 240 mm2 Cu |
| Earth bar (external): | 120 mm2 Cu - Bolt dimension: M10 |
| Colour | |

| | |
|---|---|
| Front Cover | RAL 7035 |
| Side & Cable Cover | RAL 7035 |

- **General Requirement:**

The Ring Main Unit shall be installed at existing 11/0.433 kV Substation inside Cargo Jetty area. The RMU shall be extensible. Two Circuit Breaker for incoming cable and three Circuit breaker for outgoing feeder, shall be enclosed in the main tank using SF6 gas as insulating and vacuum as arc quenching medium or SF6 gas as both insulating and arc quenching medium. The main tank shall be stainless steel sheet of 2mm thickness and robotically welded with a pressure relief arrangement. Incomer as well as Outgoing feeder shall be provided with Energy Meters.

The cable entry shall be from bottom and the end terminations shall be done on front side.

**Inner enclosure (Main tank)**

The tank shall be robotically welded stainless steel sheet of 2mm thickness. The tank shall be sealed and no handling of gas should be required throughout the 25 years of service life. However, the SF6 gas pressure inside the tank shall be constantly monitored by a temperature compensating gas pressure indicator offering a simple go, no-go indication. The gas pressure indicator shall be provided with green pressure and red pressure zones. There shall be one Non - return valve to fill up the gas. The manufacturer shall give guarantee for maximum leakage rate of SF6 gas will be lower than 0.1% per Year. An absorption material such as activated alumina in the tank shall be provided to absorb the moisture from the SF6 gas to regenerate the SF6 gas following arc interruption. The degree of protection of the inner enclosure shall be IP 67.

The compact RMU Unit shall be provided with a suitable pedestal made up of M.S. Angle to mount the unit. The height of the bottom of cable box shall be minimum 310 mm to provide the turning radius for the HT cable termination.

- **BUS BARS:**

Three nos. of continuous Bus bars made up of EC grade electrolytic copper of rating current 630A shall be provided. The Short time rating current shall be 20kA for 3 seconds for 11kV. The Bus bar connections shall Anti - oxide greased.

ELECTRICAL DATA:

- 12 kV - 28kV - 1min
- Nominal voltage: 11 kV
- Rated frequency: 50 Hz
- Rated current bus bars: 630 A
- Rated current cable switch dis-connector: 630 A
- Short time withstands current:
  - Cable switch dis-connector with interface C (400-bolt) bushing: 21 kA RMS 3 Seconds
  - Vacuum circuit breaker with interface C (400-bolt) bushing: 21 kA RMS 3 Seconds
- Rated current for transformer T-off: 630 A
- Impulse withstands voltage: To earth and between phases: 95 kV
- Insulation level: - Power frequency 1 min: 28 kV.

Relay & Protection Scheme:

Numerical Relay with Control Supply 24V DC, 50Hz. Phase current input Relay shall be suitable for 1A and %A CT secondary (selectable at site). Relay shall be suitable for protection core CT

connection. Metering core shall be connected to measuring instruments separately. Ground current input Relay shall be suitable for residually connected CT input. The relay shall have provision for digital inputs, speed switch inputs. The Communication System of the relay shall be equipped with RS485 for remote communication or for connection to DCS, SCADA or PLC. The relay shall be suitable for port for connection to Laptop & PC preferably of front side. Relay shall support Modbus Protocol. Relay shall be ABB REF615 / Siemens 7SR.

- **Front Plate:**

The front shall include a clear mimic diagram which indicates different functions. The position indicators shall give a true reflection of the position of the main contacts and shall be clearly visible to the operator. The lever operating direction shall be clearly indicated in the mimic diagram. The manufacturer's plate shall include the switchboard's main electrical characteristics.

- **Danger Board:**

The danger Board plate as per relevant IS shall be riveted on the front plate of the RMU in Languages viz. Gujarati, Hindi, English.

**TYPE and ROUTINE TESTS:**

Type tests:

The equipment offered in the tender should have been successfully type tested at NABL Laboratories in India or ERDA or equivalent international laboratories for the tests in line with the relevant standard and technical specification and manufacture to submit the valid type test certificates.

**Following Type Test must have been carried out**:

- Short time current withstand test and peak current withstand test.
- Lightening Impulse voltage withstand test.
- Temperature rise test.
- Short Circuit current making and breaking tests.
- Power frequency voltage withstand test (dry).
- Mechanical operation test.
- Checking of degree of protection of main tank and outer enclosure.
- Checking of partial discharge on complete unit.

- **ACCEPTANCE & ROUTINE TESTS:**

All acceptance and routine tests as stipulated in the respective applicable standards amended up to date for all the equipment shall be carried out by the contractor in the presence of DPA representative & TPIA without any extra cost to DPA before dispatch.

The routine tests are as follows:

1) Conformity with drawings and diagrams,
2) Measurement of closing and opening speeds,
3) Measurement of operating torque,
4) Checking of filling pressure,
5) Checking of gas-tightness,
6) Dielectric testing and main circuit resistance measurement,
7) Power frequency voltage,
8) Resistance test for the circuit,
9) Mechanical operation tests.

The contractor, in the presence of representative of DPA & TPIA, shall carry out all above acceptance and routine tests. The contractor shall give at least 15 days advance intimation to DPA to enable to depute representative for witnessing the tests.

The DPA reserves the right for carrying out any other tests of a reasonable nature at the works of the supplier/laboratory or at any other recognized laboratory/research institute in addition to the above mentioned type, acceptance and routine tests at the cost of the DPA to satisfy that the material complies with the intent of this specification.

- **DRAWINGS:**

All drawings shall conform to relevant IEC Standards Specification. All drawings shall be in ink.

The Contractor shall submit dimensional general arrangement drawings of the equipment, illustrative and descriptive literature in triplicate for various items in the RMUs, which are all essentially required for future automation.

i) Schematic diagram of the RMU panel
ii) Instruction manuals
iii) Catalogues of spares recommended with drawing to indicate each items of spares
iv) List of spares and special tools recommended by the supplier.
v) Copies of Type Test Certificates as per latest IS/IEC.
vi) Drawings of equipment, relays, control wiring circuit, etc.
vii) Foundation drawings of RMU.
viii) Dimensional drawings of each material used for item (vi).
ix) Actual single line diagram of RMU with or without extra combinations shall be made displayed on the front portion of the RMU so as to carry out the operations easily.

The following should be supplied by contractor:

Copies in triplicate of printed volumes of operation, maintenance and erection manuals in English along with the copies of approved drawings and type test reports etc. sets of the manuals as above shall be supplied to the Engineer-in-Charge along with a soft copy of the all Technical and Drawing.

- **NAME PLATE:**

Each RMU and its associated equipment shall be provided with a nameplate legible and indelibly marked with at least the following information.

- Name of manufacturer
- Type
- Serial number
- Voltage Current
- Frequency
- Symmetrical breaking capacity
- Making capacity
- Short time current and its duration
- Purchase Order number and date
- Month and Year of supply

**TRAINING:**

The contractor shall provide training to Operational Staff and Engineers of DPA. In case of training at manufacturer's works is required, necessary expenses towards boarding, lodging & traveling for the deputed Engineers of DPA shall be borne by DPA.

- **PERFORMANCE GUARANTEE:**

All equipment supplied against this specification shall be guaranteed for a period 12 months from the date of commissioning. However, any engineering error, omission, wrong provision, etc. which do not have any effect on the time period, shall be attended to as and when observed/pointed out without any financial implication on DPA.

The contractor shall supply at site 11 kV, 630 Amp, Indoor Compact Switchgear (Gas Insulated), Extensible on One Side, Motor Driven Spring Charging having 4 nos. Circuit Breaker Modules mentioned as under:
Module No. 1 & 2 as 11 kV Incomer along with PT, Module No. 3 & 4 as Circuit Breaker Module suitable for Distribution Transformer and Module No. 5 as spare 11 kV outgoing feeder.

The Circuit breaker modules shall be supplied with three position isolator/earthing switch, bus bars, interlocking, earth bar and stored spring energy mechanism.

| **Qty. for each module** | **Details of Module No. 1 & 2** |
|---|---|
| 1 | Stored energy mech. For manual and Motor Driven Spring Charged operation |
| 1 | PT for incomer for metering purpose 11 kV/110 V, Class 0.5 |
| 1 | Multifunction Energy Meter with RS485 |
| 1 | Circuit breaker 12 kV, 630 A |
| 1 | Control voltage, trip coil 24 V DC |
| 1 | Protection system:<br>Relay must be Numeric type with following features:<br>a) Self-Powered OC+EF Protection Relay<br>b) Control voltage, 24 V DC<br>c) Interference RS-485, RS232 port<br>d) Equivalent to CAG 37 for Instantaneous Over Current<br>e) Equivalent to CTUM 15 for short Circuit protection, Inst. Earth fault<br>f) Instantaneous definite time & inverse type protection of over current. |
| 1 | Set of three ring core metering & protection CTs:<br>CTs of 300-200/1-1A, 5P10, 2.5VA for protection and 300-200/1-1A CL 0.5, 2.5VA for metering<br>(considering the cable size 3Cx 300 sq. mm HT XLPE cable) |
| 1 | Breaker ON(red)/OFF(green)/TRIP(amber) LED Indication |
| 1 | Capacitive voltage indication fixed type |
| 1 | Suitable Power Pack for Auxiliary DC Power supply for Relays |

| **Qty. for each module** | **Details of Module No. 3, 4 & 5** |
|---|---|
| 1 | Stored energy mech. for manual and Motor Driven Spring Charged operation |

| | |
|---|---|
| 1 | Multifunction Energy Meter with RS485 |
| 1 | Circuit breaker 12 kV, 630 A |
| 1 | Control voltage, trip coil 24 V DC |
| 1 | Self-Powered OC+EF Protection Relay |
| 1 | Set of three ring core metering & protection CTs:<br>CTs of 150-100/1-1A, 5P10, 2.5VA for protection and 150-100/1-1A CL 0.5, 2.5VA for metering<br>(considering the cable size 3Cx 300 sq. mm HT XLPE cable) |
| 1 | Set of Transformer Protection Annunciation Scheme comprising of:<br>1 no. Master Trip Relay (24VDC)<br>6 no. Aux. Relays (24VDC)<br>1 no. 8-Window Annunciator & Hotter<br>Suitable for providing facility for Buchholz/OTI/WTI Alarm/Trip Indication, |
| 1 | Breaker ON(red)/OFF(green)/TRIP(amber) LED Indication |
| 1 | Capacitive voltage indication fixed type |
| 1 | Suitable Power Pack for Auxiliary DC Power supply for Electro-Mechanical Aux Relays and Master Trip Relays |

**In addition to above following material shall be supplied by Contractor for each panel.**

| Qty. | Material to be supplied by Contractor with each panel |
|---|---|
| 3 | Set of Terminal Protector boots for covering cable-termination. |
| 1 | Manometer installed on RMU for Gas Pressure indication. |
| 2 | Operating handle |

**Note: The contractor shall provide 5 Years warranty against the low pressure of pre-filled SF6 gas in the RMU from the date of commissioning of RMU.**

The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 2:**

This item includes installation, testing and commissioning of supplied RMU panel at exiting 11/0.433 kV Substation inside Cargo Jetty area.

The RMU Panel shall be erected by using suitable size of M.S. channel (to be supplied & erected by contractor, as per each module approved foundation drawing) foundation bolts including grouting of the bolts of each Module RMU panel. The RMU panel shall be connected with two separate and distinct earthing system. After installation of RMU panel, necessary test and trial shall be carried out for proper functioning of safety, devices, relay etc. and before charging RMU

Panel, all the tests required under relevant ISS and IEC – Rules 1956 shall be carried out and the result shall be in conformity with specifications and copies of test results shall be furnished to Engineer-in-Charge. The work includes supply & fixing of required length of insulated Rubber Mat having withstand capacity up to 22 kV, the Rubber Mat shall be laid in such a way, near the panel for operation of RMU.

The complete work shall be carried out as directed by Engineer in-Charge. The work includes required labour & material for installations, testing and commissioning of RMU as directed by Engineer-in-Charge.

**Technical Specification No. 3:**

This item includes supply at site 3 Core, 150 Sq. mm (E), 11kV grade aluminium conductor XLPE insulated armoured cable confirming to IS: 7098 (Part-II) 1988 with latest amendments with ISI mark. The cable shall have marking/embossing at an interval of every meter showing its progressive length. The contractor shall submit type test certificate at the time of supply of Cable at site. The type test certificate shall not be more than 5 years old. The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 4:**

This item includes laying of single length cable of size 3 Core, 150 Sq. mm XLPE Insulated aluminium conductor armoured cable of 11kV grade in the existing Substation cable trench. The cable shall be laid after opening of trench by removing the MS chequered plates. After laying of the cable, cable trench shall be properly covered with the existing chequered plates as per original. This includes all required material, tools & tackles and labour as directed by Engineer in-Charge.

**Technical Specification No. 5:**

This item includes supply at site indoor type heat shrink end termination kit for 3 core, 150 Sq. mm (E), HT armored aluminium conductor XLPE Cable of 11 kV grade as per the approved make list.

**Technical Specification No. 6:**

This item includes fixing of Indoor type heat shrink end termination kit of 3 Core, 150 Sq. mm size for HT armored aluminum conductor XLPE Cable of 11 kV grade. The joint shall make in such a way that joined section can be reeled without sagging and the joint shall be electrically and mechanically permanent. This includes all required material, tools & tackles and labour as directed by Engineer in charge.

**Technical Specification No. 7:**

This item includes supply at site heat shrink straight through joint kit for 3 core, 150 Sq. mm (E), HT armored aluminum conductor XLPE Cable of 11 kV grade as per the approved make list.

**Technical Specification No. 8:**

This item includes fixing of heat shrink straight through joint kit for 3 core, 150 Sq. mm HT armored aluminum conductor XLPE Cable of 11 kV grade. This includes all required material,

tools & tackles and labour as directed by Engineer in-Charge.

**Technical Specification No. 9:**

The item includes supply at site Energy Efficiency Level 3, 630 kVA, 11/0.433 kV indoor type, three phase, 50 Hz, core type double copper wound oil immersed distribution transformer with on load tap changer, accessories etc. as mentioned below:

The transformer shall confirm to IS 2026 (Part I, II & III): 1977 / IS 1180 (Part 1): 2014 as applicable and transformer oil shall confirm to IS 335 with up to date amendment. The transformer shall have Energy Efficiency Level 3.

(i) Capacity : 630 kVA

(ii) H.V. : 11000 Volts

(iii) L.V. : 433 Volts

(iv) Supply System : 3 phase, 50 Hz

(v) H.V. winding : Copper wound delta connected

(vi) L.V. winding : Copper wound star connected having Neutral separately brought out on porcelain bushing for connecting the same to earth.

(vii) Type of cooling : ONAN (Oil immersed with natural air cooled)

(viii) Vector group : Dyn11

(ix) Impedance : 4.5%

(x) Conservator : With sump, drain valve, cover plate and magnetic oil level gauge including minimum oil filling level marking and low level alarm contacts.

(xi) Off load tap : Tap changer shall be changer unidirectional type for voltage variation of - 5% to 12.5% on HT winding in equal steps of 2.5%.

(xii) The transformer shall be provided with the following accessories:

(a) Oil drain valve with plug
(b) Filter valve with plug
(c) Thermometer pocket
(d) Two nos. earthing terminals
(e) Silica gel dehydrating breather
(f) Air release plug
(g) Explosion vent
(h) 4 nos. bidirectional flat rollers
(i) Lifting lugs for main tank and for all items to be handled independently
(j) Rating and terminal marking plate
(k) Buchholz relay, double float type with testing and sampling cocks
(l) 150 mm dial, winding temperature gauge with maximum reading pointer, alarm and trip contacts
(m) 150 mm dial, oil temperature gauge with maximum reading pointer, alarm and trip contacts
(n) Marshalling box
(o) Base channel with towing holes.

(xiii) Temperature rise in oil/winding shall be 50/55 °C above ambient temperature of 45°C.

(xiv) CRCA pressed sheet radiator bank complete with air release plug, drain plug and isolating valve at points of connections with tank.

(xv) Painting:

(a) Internally with oil resisting varnish paint and,

(b) Externally with two coats of zinc rich primer followed by two coats of colour epoxy paint shade no. 631 of IS 5.

**Special Conditions for 630 kVA Distribution Transformer**

- Maximum Losses at 50% loading at 75ºC (Watts): 1637
- Maximum Losses at 100% loading at 75ºC (Watts): 4438
- Normal Flux Density (at rated voltage and frequency): 1.6 T
- Maximum flux density (Increase of +12.5% combined voltage and frequency variation from rated voltage and frequency: 1.9 T (Max.)
- Maximum current density (A/mm²): 2.8
- Metering CT for LV side: 800/5
- Accuracy Class for metering CT: 0.5 Burden: 20 VA

(1) The transformer shall be double wound, copper coil, oil immersed, naturally cooled (ONAN) and non-sealed type with plain rectangular tank.

(2) The transformer shall be suitable for service with fluctuations in supply voltage up to plus 12.5% to minus 2.5%.

(3) The transformer and accessories shall be designed to facilitate operation, inspection, maintenance and repairs. The design shall incorporate every precaution and provision for the safety of equipment as well as staff engaged in operation and maintenance of equipment.

(4) All outdoor apparatus, including bushing insulators with their mountings, shall be designed so as to avoid any accumulation of water.

**2. Core**

- The core shall have low loss and good grain properties. It should be coated with hot oil proof insulation, bolted together with frames to prevent vibration and noise.
- The core thickness should be 0.23mm or less and grade should be M3 or better.
- All core clamping bolts (if any) shall be effectively insulated.
- Only one grade and one thickness of core shall be accepted and mixing of different grades shall not be allowed.
- The complete design of the core must ensure maximum permanency of the core losses without continuous working of the transformers.
- The value of the maximum flux density allowed in the design and grade of lamination used shall be clearly stated. The vendor shall submit the calculations in support of the same.
- The transformer shall be suitable for continuous service without damage under 'over fluxing' where the ratio of voltage over frequency exceeds the corresponding ratio at rated voltage and rated frequency up to 12.5% and the core shall not get saturated.

- The No Load current shall not exceed 2% of the Full Load current and shall be measured by energizing the transformer at rated voltage and frequency. Increase of 12.5% of rated voltage shall not increase the no - load current by 5% maximum of full load current.
- The bidder shall be required to submit the following documents in regard to procurement of core material:

  1. Invoice of supplier
  2. Mill's test certificate
  3. Packing list
  4. Bill of landing
  5. Bill of entry certificate by custom
  6. Description of material, electrical analysis, physical inspection certificate for surface defects, thickness and width of material.

**3.** The contractor shall offer the core for inspection and approval of DPA during the manufacturing stage. Penalty or black listing shall be imposed on the bidders using defective CRGO sheets.

**4**. CT terminal box of suitable size made up of Mild Steel and with theft proof locking arrangement for secondary of CT shall be provided on the side of transformer.

**5.** Box shall be provided with 12 Stud Type terminal blocks (10 + 2 spare) with shorting link.

**6.** 10 core multi-stranded PVC wire (2.5 sq.mm Cu FRLS PVC stranded panel wires) shall be used to terminate connections from CTs at LV side to the CT terminal box.

**7**. Plastic ferrules engraved with black letters shall be used to mark the wires coming from CTs.

**8**. Plastic ferrules engraved with black letters shall be used to mark the wires in the terminal box.

**9.** Suitable holes with glands to be provided on bottom side of this box as incoming and outgoing for 10 core 2.5 sq.mm cable.

**10**. CT terminal box shall have IP 55 protection.

**11. SURFACE PREPARATION AND PAINTING**

The equipment shall be designed & painted for saline weatherproof & should be guaranteed for any type of damage due to harsh climatic condition for 10 Years.

**12. RADIO INTEREFENCE**

When operated at voltages up to 12.5% in excess of the normal system rating, transformers shall be substantially free from partial discharges (i.e. corona discharges in either internal or external insulation) which are likely to cause interference with radio or telephone communication.

**13. OVERLOAD CAPACITY**

The transformer shall be suitable for loading as per IS 6600.

The contractor has to provide all test certificates from original manufacturers & relevant sourcing documents. The manufacturer shall have valid BEE certification having Type Test Report (TTR) issued by CPRI/ERDA/International Accredited Laboratory. The type tests report shall be submitted to the Engineer In-charge of the same design.

The contractor shall conduct all routine tests as specified in IS 2026 on the transformer at his own cost at the manufacturer's works in presence of TPIA/representative of DPA and shall submit test report to the Engineer-in-Charge.

The contactor shall submit general arrangement drawing of the transformer. The contractor shall submit the type test certificate of the distribution transformer from any NABL accredited laboratory which shall not be older than 5 years from the date of issue of work order.

**Technical Specification No. 10:**

This item includes installation, testing and commissioning of 630 kVA, 11/0.433 kV indoor type distribution transformer at existing electrical substation inside cargo jetty area. The transformer shall be installed on prepared pedestal in the substation. Before charging the transformer all the tests shall be carried out as per relevant IS specifications and IE Rules 1956. The transformer shall be properly leveled on foundation including suitable stoppers. The transformer oil shall be tested before transformer is charged and dielectric strength acidity, Sulphur contents shall be in accordance with IS 335 with latest amendments. This includes all material, labour, tools & tackles as directed by Engineer-In-charge.

**Technical Specification No. 11:**

This item includes design, manufacture, testing & supply at site 6 Way, 1000 Amp, LT Power Distribution Panel suitable for 415V, 3 Phase 4 Wire, 50Hz AC supply system including Switchgears and internal wiring complete in all respect. The LT panel shall be extensible on one side.

The Panel shall be fixed, indoor floor mounting, free standing, compartmentalized, front opening, enclosed cubicle, dust & vermin proof. The Panel shall have Ingress Protection of IP 52. The thickness of the CRCA sheet for frame, load bearing members, side, top & gland plate shall be minimum 2 mm and for door, cover, partition the thickness shall be minimum 1.6 mm. The Base of Panel shall be made from ISMC 75 channel with two coats of primer & black paint. Surface pre-treatment shall be carried out by 7 tank chemical process. Panel shall be painted with two coats of zinc rich primer paint and two coats of Siemens Grey Wrinkle Shade No. RAL 7032. The Bus-bars shall be of high conductivity aluminum alloy of E91E grade, Bus bar joints shall be complete with high tensile steel bolt and washers and nuts bus bar of 1000 Amp rating for three Phases and Half the size of Neutral including color coded PVC sleeve. All the bus bar shall be supported on hylam/epoxy insulator. Minimum clearance between Phase to Phase, Phase to Neutral and Neutral to Earth for the entire run of horizontal and vertical bus-bars, shall be 25 mm. Bakelite sheet of 12 mm (Minimum) thickness shall be provided in side enclosure of panel and wherever it is found necessary under relevant IS specification and IER 1956. The panel shall be provided with metallic engraved labels on front for identification of Incoming & Outgoing feeders. The neoprene gaskets shall be provided on the periphery of the doors of all feeders.

The sleeved bus-bars with epoxy insulators with Bakelite support and separators shall be provided with colour code.

All power cables shall enter the switchboard from the bottom on the back of the panel. Sufficient space shall be provided for ease of connection and termination of cables.

Any other electrical component for which details not mentioned but required for operational point of view is to be also considered.

The panel shall be complete in all respect with cable glands, lugs for incoming & outgoing cables along with 2 nos. of earthing terminals.

The panel shall be comprised with following accessories:

**1) Main Incomer (1 No.)**

The Main Incomer Feeder shall be provided with 1 no. 1000 Amp, 50 kA, 415 Volt, Four Pole – MDO (Draw out type) ACB (Air Circuit Breaker) with Microprocessor released over current, Short circuit and Earth fault relay with Shunt Trip & under Voltage Coil.

The Digital Multi-Function Energy Meter (accuracy class 0.5) with LCD display shall be provided with parameters like kWh, MD, Voltage of each phase, Line current for each Phase, PF of each

Phase, P.F average, Instantaneous kW, Frequency & Date & Time. The Energy Meter shall have RS485/RS232/Ethernet communication port for output.

The LED Indication lamps 6 nos. for R, Y, B, ON, OFF and trip indication shall be provided.

The 3 Nos. CTs having ratio of 1000/5 Amps, class 0.5 tape wound, shall be provided for metering on each feeder and 4 nos. control fuses / neutral links are to be provided with incomer & the control wiring shall be done with copper wire.

**2) OUTGOING FEEDERS (6 Nos.):**

The Outgoing Feeders shall be provided with

(1) 2 No. FP MCCB, 400 Amp, 415 Volt, 36kA breaking capacity with Microprocessor based

(2) 2 No. FP MCCB, 250 Amp, 415 Volt, 36kA breaking capacity with Microprocessor based

(3) 2 Nos. FP MCCB, 200 Amp, 415 Volt, 25 kA breaking capacity with Microprocessor based

Each feeder shall have Digital Multi-Function Energy Meter, Accuracy Class 0.5 for measurement of energy consumption of the feeder with RS485/RS232/Ethernet communication port for output. The LED Indication lamps 6 nos. for R, Y, B, ON, OFF and trip indication shall be provided on each feeder. The control wiring & power wiring shall be done with copper wire properly and the power wiring shall be brought up to the Power terminal block of suitable ampere capacity.

The LT Panel shall be tested as per the relevant IS standard. Before Manufacturing the LT Panel, the relevant test certificate in support of LT distribution panel manufacturing, along with design & drawing shall be submitted to DPA for approval and also all Electrical accessories shall be used as per approved Make List of DPA.

**Technical Specification No. 12:**

This item includes installation, testing and commissioning of supplied 6-way LT Power Distribution Panel in Substation. The work includes end termination, connection of cables laid between Distribution Transformer's LT side and the LT Power distribution panel including earth connection. This includes necessary mounting hardware for bolting/welding down the base frame to the foundation. All alignment, leveling, grouting, anchoring adjustments shall be carried out in accordance with manufacturer's instruction or as directed by Engineer-in-charge. The work includes termination of the laid Cables along with providing suitable size of lugs, glands and necessary earth linking connection. All connections in Distribution Panel shall be completed, checked and adjusted to ensure safety and satisfactory operation of the equipment. After installation of the Distribution Panel, testing and commissioning shall be done as directed.

**Technical Specification No. 13:**

This item includes supply at site 1.1kV grade, Single Core, 1000 Sq.mm, Aluminium Conductor, XLPE Insulated, PVC Sheathed, Round Wire Armoured Cable conforming to IS:7098 (Part-I):1988 with latest amendment. The cable shall have marking/embossing at an interval of every 1.0 meter showing its progressive length. The color of outer sheath shall be Red.

The contractor shall submit Type Test Report for the type tests conducted in accordance with IS:7098(Part-I): 1988 within last 5 years from the date of Work Order on similar type of Cables in a NABL accredited Test House or Laboratory at the time of supply of Cable at site. The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 14:**

This item includes supply at site 1.1kV grade, Single Core, 1000 Sq.mm, Aluminium Conductor, XLPE Insulated, PVC Sheathed, Round Wire Armoured Cable conforming to IS:7098 (Part-I):1988 with latest amendment. The cable shall have marking/embossing at an interval of every 1.0 meter showing its progressive length. The color of outer sheath shall be Yellow.

The contractor shall submit Type Test Report for the type tests conducted in accordance with IS:7098(Part-I): 1988 within last 5 years from the date of Work Order on similar type of Cables in a NABL accredited Test House or Laboratory at the time of supply of Cable at site. The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 15:**

This item includes supply at site 1.1kV grade, Single Core, 1000 Sq.mm, Aluminium Conductor, XLPE Insulated, PVC Sheathed, Round Wire Armoured Cable conforming to IS:7098 (Part-I):1988 with latest amendment. The cable shall have marking/embossing at an interval of every 1.0 meter showing its progressive length. The color of outer sheath shall be Blue.

The contractor shall submit Type Test Report for the type tests conducted in accordance with IS:7098(Part-I): 1988 within last 5 years from the date of Work Order on similar type of Cables in a NABL accredited Test House or Laboratory at the time of supply of Cable at site. The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 16:**

This item includes supply at site 1.1kV grade, Single Core, 1000 Sq.mm, Aluminium Conductor, XLPE Insulated, PVC Sheathed, Round Wire Armoured Cable conforming to IS:7098 (Part-I):1988 with latest amendment. The cable shall have marking/embossing at an interval of every 1.0 meter showing its progressive length. The color of outer sheath shall be Black.

The contractor shall submit Type Test Report for the type tests conducted in accordance with IS:7098(Part-I): 1988 within last 5 years from the date of Work Order on similar type of Cables in a NABL accredited Test House or Laboratory at the time of supply of Cable at site. The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 17:**

This item includes supply at site 1.1kV grade, Four Core, 300 Sq.mm, Aluminium Conductor, XLPE Insulated, PVC Sheathed, Flat Strip Armoured Cable conforming to IS:7098 (Part-I):1988 with latest amendment. The cable shall have marking/embossing at an interval of every 1.0 meter showing its progressive length.

The contractor shall submit Type Test Report for the type tests conducted in accordance with IS:7098(Part-I): 1988 within last 5 years from the date of Work Order on similar type of Cables in a NABL accredited Test House or Laboratory at the time of supply of Cable at site. The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 18:**

This item includes supply at site 1.1kV grade, Four Core, 240 Sq.mm, Aluminium Conductor, XLPE Insulated, PVC Sheathed, Flat Strip Armoured Cable conforming to IS:7098 (Part-I):1988 with

latest amendment. The cable shall have marking/embossing at an interval of every 1.0 meter showing its progressive length.

The contractor shall submit Type Test Report for the type tests conducted in accordance with IS:7098(Part-I): 1988 within last 5 years from the date of Work Order on similar type of Cables in a NABL accredited Test House or Laboratory at the time of supply of Cable at site. The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 19:**

This item includes supply at site 1.1kV grade, Four Core, 50 Sq.mm, Aluminium Conductor, XLPE Insulated, PVC Sheathed, Flat Strip Armoured Cable conforming to IS:7098 (Part-I):1988 with latest amendment. The cable shall have marking/embossing at an interval of every 1.0 meter showing its progressive length.

The contractor shall submit Type Test Report for the type tests conducted in accordance with IS:7098(Part-I): 1988 within last 5 years from the date of Work Order on similar type of Cables in a NABL accredited Test House or Laboratory at the time of supply of Cable at site. The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 20:**

This item includes supply at site 1.1kV grade, Four Core, 6 Sq.mm, Aluminium Conductor, XLPE Insulated, PVC Sheathed, Flat Strip Armoured Cable conforming to IS:7098 (Part-I):1988 with latest amendment. The cable shall have marking/embossing at an interval of every 1.0 meter showing its progressive length.

The contractor shall submit Type Test Report for the type tests conducted in accordance with IS:7098(Part-I): 1988 within last 5 years from the date of Work Order on similar type of Cables in a NABL accredited Test House or Laboratory at the time of supply of Cable at site. The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 21:**

This item includes supply at site 1.1kV grade, Three Core, 1.5 Sq.mm, Copper Conductor, XLPE Insulated, PVC Sheathed, Round Wire Armoured Cable conforming to IS:7098 (Part-I): 1988 with latest amendment. The cable shall have marking/embossing at an interval of every 1.0 meter showing its progressive length.

The contractor shall submit Type Test Report for the type tests conducted in accordance with IS:7098(Part-I): 1988 within last 5 years from the date of Work Order on similar type of Cables in a NABL accredited Test House or Laboratory at the time of supply of Cable at site. The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 22:**

This item includes supply at site hot dip galvanized steel ladder type cable tray of following size along with its accessories:

Cable Tray:

Ladder Tray Dimension: 1000mm (W) × 100mm (H) × 20mm (C), 2500mm length.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Tray Cover:

Width: Suitable for 1000 mm (width) cable tray,

Thickness: 1 mm, Length: 2500mm, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The ladder type cable tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Cable Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Cable Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.

The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of cable tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 23:**

This item includes supply at site hot dip galvanized 90-degree Vertical Inside Riser for steel ladder type cable tray of following size along with its accessories:

Inside Riser:

Dimension: 1000mm (W) × 100mm (H) × 20mm (C), Radius: 600mm.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Riser Tray Cover:

Width: Suitable for 1000 mm (width) cable tray riser,

Thickness: 1 mm, Length: As per Inside Riser, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The Riser tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Riser Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Riser Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.

The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Riser Tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 24:**

This item includes supply at site hot dip galvanized 90-degree Vertical Outside Riser for steel ladder type cable tray of following size along with its accessories:

Inside Riser:

Dimension: 1000mm (W) × 100mm (H) × 20mm (C), Radius: 600mm.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Riser Tray Cover:

Width: Suitable for 1000 mm (width) cable tray riser,

Thickness: 1 mm, Length: As per Outside Riser, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The Riser tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Riser Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Riser Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.

The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Riser Tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 25:**

This item includes supply at site hot dip galvanized steel ladder type cable tray of following size along with its accessories:

Cable Tray:

Ladder Tray Dimension: 800mm (W) × 100mm (H) × 20mm (C), 2500mm length.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Tray Cover:

Width: Suitable for 800 mm (width) cable tray,

Thickness: 1 mm, Length: 2500mm, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The ladder type cable tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Cable Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Cable Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.

The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of cable tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 26:**

This item includes supply at site hot dip galvanized steel ladder type cable tray of following size along with its accessories:

Cable Tray:

Ladder Tray Dimension: 600mm (W) × 100mm (H) × 20mm (C), 2500mm length.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Tray Cover:

Width: Suitable for 600 mm (width) cable tray,

Thickness: 1 mm, Length: 2500mm, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The ladder type cable tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Cable Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Cable Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.

The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of cable tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 27:**

This item includes supply at site hot dip galvanized steel ladder type cable tray of following size along with its accessories:

Cable Tray:

Ladder Tray Dimension: 500mm (W) × 100mm (H) × 20mm (C), 2500mm length.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Tray Cover:

Width: Suitable for 500 mm (width) cable tray,

Thickness: 1 mm, Length: 2500mm, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The ladder type cable tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Cable Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Cable Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.

The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of cable tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 28:**

This item includes supply at site hot dip galvanized 90-degree Vertical Inside Riser for steel ladder type cable tray of following size along with its accessories:

Inside Riser:

Dimension: 500mm (W) × 100mm (H) × 20mm (C), Radius: 600mm.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Riser Tray Cover:

Width: Suitable for 500 mm (width) cable tray riser,

Thickness: 1 mm, Length: As per Inside Riser, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The Riser tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Riser Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Riser Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.

The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Riser Tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 29:**

This item includes supply at site hot dip galvanized 90-degree Vertical Outside Riser for steel ladder type cable tray of following size along with its accessories:

Inside Riser:

Dimension: 500mm (W) × 100mm (H) × 20mm (C), Radius: 600mm.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Riser Tray Cover:

Width: Suitable for 500 mm (width) cable tray riser,

Thickness: 1 mm, Length: As per Outside Riser, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The Riser tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Riser Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Riser Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.
The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Riser Tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 30:**

This item includes supply at site hot dip galvanized steel Ladder Type Cable Tray of following size along with its accessories:

Cable Tray:

Ladder Tray Dimension: 400mm (W) × 100mm (H) × 20mm (C), 2500mm length.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Tray Cover:

Width: Suitable for 400 mm (width) cable tray,

Thickness: 1 mm, Length: 2500mm, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The ladder type cable tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Cable Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Cable Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.

The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of cable tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 31:**

This item includes supply at site hot dip galvanized 90-degree Vertical Inside Riser for steel ladder type cable tray of following size along with its accessories:

Inside Riser:

Dimension: 400mm (W) × 100mm (H) × 20mm (C), Radius: 600mm.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Riser Tray Cover:

Width: Suitable for 400 mm (width) cable tray riser,

Thickness: 1 mm, Length: As per Inside Riser, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The Riser tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Riser Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Riser Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.

The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Riser Tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 32:**

This item includes supply at site hot dip galvanized 90-degree Vertical Outside Riser for steel ladder type cable tray of following size along with its accessories:

Inside Riser:

Dimension: 400mm (W) × 100mm (H) × 20mm (C), Radius: 600mm.

Runner: 100mm (H) × 20mm (C) × 2mm (T),

Rung: 40mm (W) × 20mm (C) × 2mm (T),

Distance between Rungs: 250mm.

Riser Tray Cover:

Width: Suitable for 400 mm (width) cable tray riser,

Thickness: 1 mm, Length: As per Outside Riser, Height: 30mm

Coupler Plates:

Coupler Plates shall have 8 holes (4 holes & 4 slots) suitable with tray dimensions. The thickness of the Coupler Plates shall be 3mm.

Hardware:

Sets of M8×25mm long SS304 bolt & nut with two plain washers and one spring washer suitable for coupler plates as per requirement.

The Riser tray shall be made out of minimum 2 mm thick Rolled Sheet Steel. The tray shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the trays shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Riser Tray will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. All materials, hardware components shall function and work properly against deterioration due to the aggressive climate conditions.

The Riser Tray manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection.

The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Riser Tray. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 33:**

This item includes supply at site hot dip galvanized steel Cantilever Bracket Support of size 1200mm (L) x 40mm (W) x 500mm (H) x 50mm (Height of other end of bracket) x 2mm (T). The Cantilever Bracket Support shall be made out of minimum 2 mm thick Rolled Sheet Steel. The support shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the support shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Supports will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. The Support shall function and work properly against deterioration due to the aggressive climate conditions.

The Support manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection. The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Cantilever Bracket Support. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 34:**

This item includes supply at site hot dip galvanized steel Cantilever Bracket Support of size 1000mm (L) x 40mm (W) x 500mm (H) x 50mm (Height of other end of bracket) x 2mm (T). The Cantilever Bracket Support shall be made out of minimum 2 mm thick Rolled Sheet Steel. The support shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the support shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Supports will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to

be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. The Support shall function and work properly against deterioration due to the aggressive climate conditions.
The Support manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection. The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Cantilever Bracket Support. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 35:**

This item includes supply at site hot dip galvanized steel Cantilever Bracket Support of size 800mm (L) x 40mm (W) x 400mm (H) x 50mm (Height of other end of bracket) x 2mm (T). The Cantilever Bracket Support shall be made out of minimum 2 mm thick Rolled Sheet Steel. The support shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the support shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Supports will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. The Support shall function and work properly against deterioration due to the aggressive climate conditions.
The Support manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection. The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Cantilever Bracket Support. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 36:**

This item includes supply at site hot dip galvanized steel Cantilever Bracket Support of size 700mm (L) x 40mm (W) x 400mm (H) x 50mm (Height of other end of bracket) x 2mm (T). The Cantilever Bracket Support shall be made out of minimum 2 mm thick Rolled Sheet Steel. The support shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. After fabrication, the support shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Supports will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. The Support shall function and work properly against deterioration due to the aggressive climate conditions.
The Support manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection. The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Cantilever Bracket Support. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 37:**

This item includes supply at site hot dip galvanized steel Cantilever Bracket Support of size 600mm (L) x 40mm (W) x 400mm (H) x 50mm (Height of other end of bracket) x 2mm (T). The Cantilever Bracket Support shall be made out of minimum 2 mm thick Rolled Sheet Steel. The support shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling,

welding etc. It shall be free from burr & sharp edges. After fabrication, the support shall be Hot Dip Galvanized as per IS 2629: 1989 and coverage as per IS 4759:1984. The minimum thickness of galvanizing shall be 120 microns.

The Supports will be inspected at site and if damage to galvanization is noticed or the thickness of any section with inadequate thickness of galvanization is noticed the same will have to be repair/replaced to the satisfaction of the DPA or Third Party Inspection agency. Site galvanization or site repairs will not be permitted. The Support shall function and work properly against deterioration due to the aggressive climate conditions.

The Support manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection. The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of Cantilever Bracket Support. The rate shall be inclusive of all the taxes (excluding GST), insurance, packing, forwarding, transportation, unloading at site as directed by Engineer-in-Charge.

**Technical Specification No. 38:**

This item includes fixing of 1200mm Cantilever Bracket Support on the RCC Structure/ Wall of Shed at a height of approximately 4m. The Cantilever Bracket Support shall be rigidly fixed with three stainless steel expansion Anchor Fasteners of minimum size M10 x 160mm on RCC Structure/ Wall of Shed. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 39:**

This item includes fixing of 1000mm Cantilever Bracket Support on the RCC Structure/ Wall of Shed at a height of approximately 4m. The Cantilever Bracket Support shall be rigidly fixed with three stainless steel expansion Anchor Fasteners of minimum size M10 x 160mm on RCC Structure/ Wall of Shed. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 40:**

This item includes fixing of 800mm Cantilever Bracket Support on the RCC Structure/ Wall of Shed at a height of approximately 4m. The Cantilever Bracket Support shall be rigidly fixed with three stainless steel expansion Anchor Fasteners of minimum size M10 x 160mm on RCC Structure/ Wall of Shed. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 41:**

This item includes fixing of 700mm Cantilever Bracket Support on the RCC Structure/ Wall of Shed at a height of approximately 4m. The Cantilever Bracket Support shall be rigidly fixed with three stainless steel expansion Anchor Fasteners of minimum size M10 x 160mm on RCC Structure/ Wall of Shed. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 42:**

This item includes fixing of 600mm Cantilever Bracket Support on the RCC Structure/ Wall of Shed at a height of approximately 4m. The Cantilever Bracket Support shall be rigidly fixed with three stainless steel expansion Anchor Fasteners of minimum size M10 x 160mm on RCC Structure/ Wall of Shed. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 43:**

This item includes fixing of 1000mm width Ladder Type Cable Tray along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 44:**

This item includes fixing of 1000mm width 90-degree Vertical Inside Riser along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 45:**

This item includes fixing of 1000mm width 90-degree Vertical Outside Riser along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 46:**

This item includes fixing of 800mm width Ladder Type Cable Tray along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 47:**

This item includes fixing of 600mm width Ladder Type Cable Tray along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 48:**

This item includes fixing of 500mm width Ladder Type Cable Tray along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and

with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 49:**

This item includes fixing of 500mm width 90-degree Vertical Inside Riser along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 50:**

This item includes fixing of 500mm width 90-degree Vertical Outside Riser along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 51:**

This item includes fixing of 400mm width Ladder Type Cable Tray along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 52:**

This item includes fixing of 400mm width 90-degree Vertical Inside Riser along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 53:**

This item includes fixing of 400mm width 90-degree Vertical Outside Riser along with accessories on the Cantilever Bracket Support mounted on wall/structure of Shed. The Tray Cover shall be fixed after completion of work of laying of Cables in the Cable Tray and after getting clearance from Engineer in-Charge. The installation shall be in accordance with equipment manufacturer's instructions, and with best workmanship & best industrial practice to the satisfaction of Engineer in-Charge. This item includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 54:**

This item includes laying of double run of 1.1kV Single Core 1000 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable in the existing cable trench of Substation. The cable shall be laid after opening of trench by removing the MS chequered plates. After laying of the cable, cable trench shall be properly covered with existing chequered plates as per its original condition. This item includes all labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 55:**

This item includes laying of double run of 1.1kV Four Core 300 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in the existing cable trench of Substation. The cable shall be laid after opening of trench by removing the MS chequered plates. After laying of the cable, cable trench shall be properly covered with existing chequered plates as per its original condition. This item includes all labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 56:**

This item includes laying of double run of 1.1kV Four Core 300 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in the existing RCC cable trench. The cable shall be laid after opening of RCC trench by removing its cover. Before laying of cable, the RCC cable trench shall be cleaned properly including removal of garbage, dust, etc. from the trench line without damaging other existing cables laying in the trench. After laying of the cable, cable trench shall be properly covered with its existing covers as per original. This item includes all labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 57:**

This item includes laying of double run of 1.1kV Four Core 300 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in horizontal cable tray installation. The cable shall be properly dressed in such a manner that crossing of cables shall be minimized. The cable shall be clamped with suitable clamps/thick PVC straps at every 1 m distance in cable tray. All cables shall be laid in parallel in side-by-side as directed by Engineer in-Charge. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 58:**

This item includes laying of double run of 1.1kV Four Core 300 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in vertical cable tray installation. The cable shall be properly dressed in such a manner that crossing of cables shall be minimized. The cable shall be clamped with suitable clamps/thick PVC straps at every 1 m distance in cable tray. All cables shall be laid in parallel in side-by-side as directed by Engineer in-Charge. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 59:**

This item includes laying of double run of 1.1kV Four Core 300 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable as Loop. The Loop shall be at both ends of the laid cable as directed by Engineer in-Charge. The cable shall be properly dressed & clamped with suitable clamps as directed by Engineer in-Charge. The work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 60:**

This item includes laying of double run of 1.1kV Four Core 240 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in the existing cable trench of Substation. The cable shall be laid after opening of trench by removing the MS chequered plates. After laying of the cable, cable trench shall be properly covered with existing chequered plates as per its original condition. This item includes all labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 61:**

This item includes laying of double run of 1.1kV Four Core 240 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in the existing RCC cable trench. The cable shall be laid after opening of RCC trench by removing its cover. Before laying of cable, the RCC cable trench shall be cleaned properly including removal of garbage, dust, etc. from the trench line without damaging other existing cables laying in the trench. After laying of the cable, cable trench shall be properly covered with its existing covers as per original. This item includes all labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 62:**

This item includes laying of double run of 1.1kV Four Core 240 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in horizontal cable tray installation. The cable shall be properly dressed in such a manner that crossing of cables shall be minimized. The cable shall be clamped with suitable clamps/thick PVC straps at every 1 m distance in cable tray. All cables shall be laid in parallel in side-by-side as directed by Engineer in-Charge. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 63:**

This item includes laying of double run of 1.1kV Four Core 240 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in vertical cable tray installation. The cable shall be properly dressed in such a manner that crossing of cables shall be minimized. The cable shall be clamped with suitable clamps/thick PVC straps at every 1 m distance in cable tray. All cables shall be laid in parallel in side-by-side as directed by Engineer in-Charge. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 64:**

This item includes laying of double run of 1.1kV Four Core 240 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in the existing NP2 Pipe Trench. The cable shall be passed through the existing NP2 pipe after opening & removing RCC trench manhole cover. After laying of the cable, the manhole shall be properly covered with existing removed RCC covers as per its original position. At approximately 31m, 18m & 31m length of NP2 Pipe, a suitable size of manhole will exist. This item includes all labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 65:**

This item includes laying of double run of 1.1kV Four Core 240 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable as Loop. The Loop shall be at both ends of the laid cable as directed by Engineer in-Charge. The cable shall be properly dressed & clamped with suitable clamps as directed by Engineer in-Charge. The work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 66:**

This item includes laying of 1.1kV Four Core 50 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in horizontal cable tray installation. The cable shall be properly dressed in such a manner that crossing of cables shall be minimized. The cable shall be clamped with suitable clamps/thick PVC straps at every 1 m distance in cable tray. All cables shall be laid in parallel in side-by-side as directed by Engineer in-Charge. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 67:**

This item includes laying of 1.1kV Four Core 50 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in vertical cable tray installation. The cable shall be properly dressed in such a manner that crossing of cables shall be minimized. The cable shall be clamped with suitable clamps/thick PVC straps at every 1 m distance in cable tray. All cables shall be laid in parallel in side-by-side as directed by Engineer in-Charge. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 68:**

This item includes laying of 1.1kV Four Core 50 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable as Loop. The Loop shall be at both ends of the each laid cable as directed by Engineer in-Charge. The cable shall be properly dressed & clamped with suitable clamps as directed by Engineer in-Charge. The work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 69:**

This item includes laying of 1.1kV Four Core 6 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in horizontal cable tray installation. The cable shall be properly dressed in such a manner that crossing of cables shall be minimized. The cable shall be clamped with suitable clamps/thick PVC straps at every 1 m distance in cable tray. All cables shall be laid in parallel in side-by-side as directed by Engineer in-Charge. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 70:**

This item includes laying of 1.1kV Four Core 6 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in vertical cable tray installation. The cable shall be properly dressed in such a manner that crossing of cables shall be minimized. The cable shall be clamped with suitable clamps/thick PVC straps at every 1 m distance in cable tray. All cables shall be laid in parallel in side-by-side as directed by Engineer in-Charge. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 71:**

This item includes laying of 1.1kV Four Core 6 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable in the existing NP2 Pipe Trench. The cable shall be passed through the existing NP2 pipe after opening & removing its cover. After laying of the cable, the trench hole shall be properly covered with existing removed cover as per its original position. At approximately 30m length of the Pipe, a suitable size of trench hole exists. This item includes all labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 72:**

This item includes laying of 1.1kV Four Core 6 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable through clamping on RCC lantern/column structure. The G.I. Saddle clamps shall be provided of size 20mm×2mm (size suitable with respect to cable outer diameter) with suitable size of heavy duty screws for clamping as directed. The cable shall be laid on RCC lantern/column structure with clamps at a height of 3.5m to 4m as directed by Engineer in-Charge. The clamp shall be fixed rigidly on lantern/column structure at 0.5m intervals. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in Charge.

**Technical Specification No. 73:**

This item includes laying of 1.1kV Four Core 6 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable through clamp provided on existing hangers in the dome shaped roof structure of the Shed. A distance between two existing hangers will be approximately 1m. The cable shall be passed & tied/fixed in the clamp provided on existing hanger in the Shed structure as directed by Engineer in-Charge. Contractor shall arrange necessary scaffolding/any other equipment of required height for laying of the cable through existing hangers in the roof structure of the Shed. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 74:**

This item includes laying of 1.1kV Four Core 6 Sq.mm Aluminium Conductor XLPE Insulated PVC Sheathed Armoured Cable as Loop. The Loop shall be at both ends of the each laid cable as directed by Engineer in-Charge. The cable shall be properly dressed & clamped with suitable clamps as directed by Engineer in-Charge. The work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 75:**

This item includes laying of 1.1kV grade, Three Core, 1.5 Sq.mm, Copper Conductor, XLPE Insulated, PVC Sheathed, Round Wire Armoured Cable through clamping on RCC structure. The G.I. Saddle clamps shall be provided of size 20mm×2mm (size suitable with respect to cable outer diameter) with suitable size of heavy duty screws for clamping as directed. The cable shall be laid on RCC structure with clamps at a height of approximately 6m as directed by Engineer in-Charge. The clamp shall be fixed rigidly on RCC structure at 0.3m intervals. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 76:**

This item includes laying of 1.1kV grade, Three Core, 1.5 Sq.mm, Copper Conductor, XLPE Insulated, PVC Sheathed, Round Wire Armoured Cable through clamp provided on existing hangers in the dome shaped roof structure of the Shed. A distance between two existing hangers will be approximately 2m. The cable shall be passed & tied/fixed in the clamp provided on existing hanger in the Shed structure as directed by Engineer in-Charge. Contractor shall arrange necessary scaffolding/any other equipment of required height for laying of the cable through existing hangers in the roof structure of the Shed. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 77:**

This item includes laying of 1.1kV grade, Three Core, 1.5 Sq.mm, Copper Conductor, XLPE Insulated, PVC Sheathed, Round Wire Armoured Cable as Loop. The Loop shall be at both ends of the each laid cable as directed by Engineer in-Charge. The cable shall be properly dressed &

clamped with suitable clamps as directed by Engineer in-Charge. The work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 78:**

This item includes design, manufacture, testing & supply at site outdoor type Load Point Panel with double door, top canopy, handle with locking arrangement (pad lock 5 level with keys).

- Load point panel shall be fabricated from Stainless Steel sheet of 2.00 mm thick, 304 Grade Stainless Steel.
- The Board shall be enclosed by stainless sheet steel of minimum 2 mm thickness smoothly finished & level, door & covers shall be made 1.6 mm thick stainless sheet steel. Adequate stiffeners shall be provided wherever necessary.
- Load point panel shall be dust & vermin proof having Protection Class of IP 54.
- Load point panel shall have bottom Cable entry.
- All panel edges and door edges shall be reinforced against distortion. Cut outs shall be true in shape and devoid of sharp edges.
- The complete structure shall be rigid, self-supporting free from vibration, twists & bends.

The Load Point Panel shall be specious for easy maintenance and shall be provided with following electrical items:

1) 400 Amp, FP MCCB, 35kA: 2 No. for Incomer
2) 400 Amp, FP Changeover Switch: 1 No.
3) 63 Amp, FP MCCB, 25 kA: 10 Nos. (Outgoing Feeder to PDB)
4) 63 Amp, FP MCCB, 25 kA: 1 No. (Spare Outgoing Feeder)
5) Digital Multi-Function Energy Meter, Accuracy Class 0.5, with RS485: 1 No.
6) 400/5 Amp CT coil (Class 0.5) Tape Wound: 3 Nos.
7) LED Indication lamps for R, Y, B, ON, OFF & Trip indication: 6 Nos.

**Main Bus & Taps**:

The board shall be provided with three phase and neutral bus-bar. Bus-bars shall be of uniform cross section throughout the length of the board and up to the incoming terminals of feeder circuit breaker/switch. The bus-bars shall be made of high conductivity aluminum alloy of E91E grade, Bus bar joints shall be complete with high tensile steel bolt and washers and nuts. Bus-bars shall be thoroughly cleaned at the joint locations and suitable contact grease shall be applied just before making a joint, separate supports shall be provided for each phase of the bus-bars. If a common support is provided for all three phase, anti-tracking barriers shall be incorporated. Bus-bars shall be adequately supported and braced to withstand the stresses due to the specified short circuit currents. Bus bar supports shall be made of hylam sheets; glass reinforced moulded plastic material or cast resin. Minimum clearance between Phase to Phase, Phase to Neutral and Neutral to Earth for the entire run of horizontal and vertical bus-bars, shall be 25 mm.

All these components shall be mounted/erected in the Load Point Panel by means of suitable cadmium passivated hardware. The Panel shall be complete in all respects with cable glands, lugs for incoming and outgoing cables including interconnection with PVC insulated cable single core, standard copper conductor of 650/1100V grade. Load point panel shall be provided with Earth Bus-bar throughout width of Panel with earth terminals.

The Load Point Panel shall be tested as per the relevant IS standard. Before Manufacturing the Load Point Panel, the relevant test certificate in support of Panel manufacturing, along with design & drawing shall be submitted to DPA for approval and also all Electrical accessories shall be used as per approved Make List of DPA.

The rates shall be inclusive of all the taxes (excluding GST), insurance, transportation, unloading as directed by Engineer-in-Charge.

**Technical Specification No. 79:**

This item includes design, manufacture, testing & supply at site outdoor type Load Point Panel with double door, top canopy, handle with locking arrangement (pad lock 5 level with keys).

- Load point panel shall be fabricated from Stainless Steel sheet of 2.00 mm thick, 304 Grade Stainless Steel.
- The Board shall be enclosed by stainless sheet steel of minimum 2 mm thickness smoothly finished & level, door & covers shall be made 1.6 mm thick stainless sheet steel. Adequate stiffeners shall be provided wherever necessary.
- Load point panel shall be dust & vermin proof having Protection Class of IP 54.
- Load point panel shall have bottom Cable entry.
- All panel edges and door edges shall be reinforced against distortion. Cut outs shall be true in shape and devoid of sharp edges.
- The complete structure shall be rigid, self-supporting free from vibration, twists & bends.

The Load Point Panel shall be specious for easy maintenance and shall be provided with following electrical items:

1) 250 Amp, FP MCCB, 35kA: 2 No. for Incomer
2) 250 Amp, FP Changeover Switch: 1 No.
3) 63 Amp, FP MCCB, 25 kA: 6 Nos. (Outgoing Feeder to PDB)
4) 63 Amp, FP MCCB, 25 kA: 1 No. (Spare Outgoing Feeder)
5) Digital Multi-Function Energy Meter, Accuracy Class 0.5, with RS485: 1 No.
6) 250/5 Amp CT coil (Class 0.5) Tape Wound: 3 Nos.
7) LED Indication lamps for R, Y, B, ON, OFF & Trip indication: 6 Nos.

**Main Bus & Taps**:

The board shall be provided with three phase and neutral bus-bar. Bus-bars shall be of uniform cross section throughout the length of the board and up to the incoming terminals of feeder circuit breaker/switch. The bus-bars shall be made of high conductivity aluminum alloy of E91E grade, Bus bar joints shall be complete with high tensile steel bolt and washers and nuts. Bus-bars shall be thoroughly cleaned at the joint locations and suitable contact grease shall be applied just before making a joint, separate supports shall be provided for each phase of the bus-bars. If a common support is provided for all three phase, anti-tracking barriers shall be incorporated. Bus-bars shall be adequately supported and braced to withstand the stresses due to the specified short circuit currents. Bus bar supports shall be made of hylam sheets; glass reinforced moulded plastic material or cast resin. Minimum clearance between Phase to Phase, Phase to Neutral and Neutral to Earth for the entire run of horizontal and vertical bus-bars, shall be 25 mm.

All these components shall be mounted/erected in the Load Point Panel by means of suitable cadmium passivated hardware. The Panel shall be complete in all respects with cable glands, lugs

for incoming and outgoing cables including interconnection with PVC insulated cable single core, standard copper conductor of 650/1100V grade. Load point panel shall be provided with Earth Bus-bar throughout width of Panel with earth terminals.

The Load Point Panel shall be tested as per the relevant IS standard. Before Manufacturing the Load Point Panel, the relevant test certificate in support of Panel manufacturing, along with design & drawing shall be submitted to DPA for approval and also all Electrical accessories shall be used as per approved Make List of DPA.

The rates shall be inclusive of all the taxes (excluding GST), insurance, transportation, unloading as directed by Engineer-in-Charge.

**Technical Specification No. 80:**

This item includes design, manufacture, testing & supply at site outdoor type FRP Power Distribution Board. The FRP Power Distribution Board shall be outdoor surface mounting type with door, with locking arrangement and top canopy. The Power Distribution Board shall be of suitable size; however, it shall be specious for easy maintenance and the minimum depth of the Distribution Board shall be 300mm.

The FRP Power Distribution Board shall have following features:

- The material for the enclosure shall be Fiber Reinforced Polyester (FRP) with F1 grade raw material of ultra-guard.
- Protection Class: IP 65.
- Impact Resistance: IK 10
- Sheet thickness shall be minimum 4 mm.
- Gasket shall be of properly greed with proper compression to maintain the ingress protection.
- Distribution Board shall comply with the requirement of dielectric strength as per IEC62208 standard, ultraviolet resistance test as per UL746C standard and glow wire test with flammability of 5VA as per UL94 standard.
- Distribution Board shall have continuous hinges. All the accessories like hinges, locking arrangement, screws & mounting brackets shall be of SS304 or higher grade SS.
- Distribution Board shall have backside mounting arrangement.
- Distribution Board edges and door edges shall be reinforced against distortion. Cut outs shall be true in shape and devoid of sharp edges.
- The complete structure shall be rigid, self-supporting free from vibration, twists & bends.
- Finished painted appearance of equipment shall present an aesthetically, pleasing appearance, free from dents and uneven surfaces.

The Power Distribution Board shall be provided with following electrical items:

1) Incomer – 63 Amp FP MCCB, 25 kA, 50Hz: 1 No.
2) Outgoing – 16A, 10kA, FP MCBs, C Curve: 8 Nos.
3) Wiring: Internal with complete wiring with suitable size of flexible copper cable for I/c to O/g, suitably bind with proper gap as per IS.
4) 70A, 415V, 3 phase contactor with coil voltage 215-240 V: 1 No.
5) Digital Timer switch for switching, single phase operated: 1 No.

The Power Distribution Board shall be complete in all respects having interconnection with PVC insulated cable single core, standard copper conductor of 1100V grade. The cable entry and exit shall be from bottom of the Distribution Board.

The Power Distribution Board shall be provided with suitable size of Earthing Busbar. Before placing the order for manufacturing the drawing should be approved by Engineer in-Charge showing the arrangement of the electrical components and should fulfil the needs of IE rules. The Power Distribution Board shall be manufactured from type test certificate holder for Power Distribution Board of similar or above rating.

The rate shall be inclusive of all taxes (excluding GST), packing, forwarding, insurance, transportation, and unloading at site of work.

**Technical Specification No. 81:**

This item includes installation, testing & commissioning of Load Point Panel (Type – 1). The Load Point Panel shall be installed on base frame made of Stainless Steel (Grade SS 304) angle of size 50mm×5mm with six legs of size 50mm×5mm×800mm each. The panel shall be erected on RCC foundation of suitable size having height of 500mm above ground level and 400mm below ground level. Before RCC, 100mm PCC shall be done. For cable entry & exit, suitable size & length of HDPE Pipe (two for Incomer & eleven for Outgoing Cables) shall be kept in the foundation during its casting as directed by Engineer in-Charge. This work also includes termination of the incoming & outgoing Cables along with providing suitable size of glands (Gland suitable for XLPE aluminium Incoming/outgoing cable size: 4C×300 sq.mm/4C×50Sq.mm) and necessary earth linking connection. The work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 82:**

This item includes installation, testing & commissioning of Load Point Panel (Type – 2). The Load Point Panel shall be installed on base frame made of Stainless Steel (Grade SS 304) angle of size 50mm×5mm with six legs of size 50mm×5mm×800mm each. The panel shall be erected on RCC foundation of suitable size having height of 500mm above ground level and 400mm below ground level. Before RCC, 100mm PCC shall be done. For cable entry & exit, suitable size & length of HDPE Pipe (two for Incomer & eleven for Outgoing Cables) shall be kept in the foundation during its casting as directed by Engineer in-Charge. This work also includes termination of the incoming & outgoing Cables along with providing suitable size of glands (Gland suitable for XLPE aluminium Incoming/outgoing cable size: 4C×240 sq.mm/4C×50 Sq.mm) and necessary earth linking connection. The work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 83:**

This item includes installation, testing & commissioning of Power Distribution Board on wall / structure as directed by Engineer in-Charge. The Distribution Board shall be fixed rigidly on wall through suitable size of anchor fasteners as directed by Engineer in-Charge. This work includes termination of the incoming & outgoing Cables along with providing suitable size of glands (Gland suitable for XLPE aluminium Incoming/outgoing cable size: 4C×50 sq.mm/4C×6 Sq.mm) and necessary earth linking connection. The work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 84:**

This item includes supply at site FRP Junction Box of size 160 mm × 160 mm × 90 mm (W×H×D) along with 9 nos. of 32A capacity Connector duly mounted on DIN rail channel with suitable size of gland for incomer 4 core, 6 Sq.mm XLPE aluminum conductor Cable and three outgoing 3 core, 1.5 Sq.mm XLPE Copper Conductor Cable. The Junction Box shall have ingress protection of IP65. The Junction Box shall be provided with suitable wall mounting bracket. The size of the Junction Box is tentative and minimum. The rate shall be inclusive of all taxes (excluding GST), insurance, transportation, unloading at site as directed by Engineer in-Charge.

**Technical Specification No. 85:**

This item includes fixing of supplied FRP Junction Box on wall/structure of the Shed at the location as directed. The Junction Box shall be fixed rigidly on wall through suitable size of nut bolts/anchor fasteners, at a height of approximately 6m, as directed. This work includes necessary wiring, connections & earth linking with all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 86:**

The contractor shall supply at site LED High Bay fittings to achieve average illumination level of not less than 150 Lux on ground level in a grid of 5m × 5m with uniformity ratio (Emin/Eavg) of 0.40 and maintenance factor of 0.80 inside Storage Shed – I (402m × 30m) & Shed – II (750m × 30m). A drawing is enclosed at Annexure – II for reference. The lighting design of inside Sheds shall comply with IS 3646: (Part II) – 1966 with latest amendments.

The bidder shall submit their illumination design with following details:

(1) Width of inside Storage Shed – I & Shed – II is 30m (Width – Y axis)

(2) Length of inside Storage Shed – I is 402m & Shed – II is 750m (Length – X axis)

(3) Position of LED high bay fittings in width – Y axis of the Shed – I & Shed – II: first fitting at 5.500m, second fitting at 14.900m & third fitting at 25.000m.

(4) Position of LED high bay fittings in length – X axis of the Shed – I (402m × 30m): first group of three fitting at 4.410m and thereafter subsequent group of three fittings at an equal distance of 10.080m up to 40$^{th}$ group of three fittings.

(5) Position of LED high bay fittings in length – X axis of the Shed – II (750m × 30m): first group of three fitting at 5.670m and thereafter subsequent group of three fittings at an equal distance of 10.710m up to 70$^{th}$ group of three fittings.

(6) Mounting height of LED high bay fittings (between Ground level of Shed and surface of the LED high bay fitting's glass) shall not be less than 12.50 m for the middle row of LED high bay fittings and not less than 10.00 m each for side rows of high bay fittings inside both Sheds.

(7) The reflection factor for the Floor, Ceiling & Wall shall not be more than 10.

(8) For Shed – I (402m × 30m) the size of grid shall not be less than 81×7 points and for Shed – II (750m × 30m) the size of grid shall not be less than 151×7 points.

The bidder shall submit their detailed design reports showing the illumination level with total quantity of fittings, maintenance factor & uniformity ratio in a grid of 5m×5m along with their bid document.

The bidder shall submit LM79 test reports of the offered LED High Bay fitting issued by any NABL accredited laboratory only for calculation of power consumption of the design along with the bid document.

Note: The locations of hangers provided in the roof structure of Storage Sheds by DPA for fixing of LED high bay fittings by the contractor will be as per the details provided at sr. no. 3, 4 & 5 above. However, the exact locations of the hangers are subject to minor change depending on the actual site condition only at Storage Sheds and the same will be decided by the Engineer in-Charge, DPA and decision of the Engineer in-Charge shall be final & binding on the contractor.

The Technical Specifications of LED High Bay Fitting is as below:

| SR.NO. | DESCRIPTION | SPECIFICATION |
|---|---|---|
| 1 | Input Power of High Bay fitting(s) | **To be offered by bidder** |
| 2 | Input voltage AC | 120-270 V AC |
| 3 | Input Frequency | 50 Hz +/-1 Hz |
| 4 | Life | 50,000 burning hours @ L70B50, Ta 35°C Outdoor |
| 5 | Mounting type for High Bay fitting | Eye bolt/Bracket for suspension mounting |
| 6 | Total Harmonic Distortion | <10% maximum |
| 7 | Working Temperature | 0°C to +45°C |
| 8 | Working Humidity | 10% to 90% RH |
| 9 | Temperature | 5700K to 6500K |
| 10 | Colour rendering index | >70 |
| 11 | Lumens / Watt | ≥ 120 Lumen/Watt at System Level |
| 12 | Finishing | Corrosion resistant powder coating |
| 13 | Power factor | Not less than 0.95 |
| 14 | Warranty | 5 Years from the date of successful commissioning.<br>It is clarified that during Warranty Period, if the material is found to be defective or has poor performance or has lumen depreciation beyond permissible limit as per LM80 report, the Contractor shall promptly, Replace the material against manufacturing defects /Rectify the material, on receiving the instruction from Engineer in-Charge at contractor's cost.<br>The contractor shall have final & total single point responsibility for performance of the LED light fittings supplied. |
| 15 | Construction | The housing should be of single piece non-corrosive powder coated pressure die-cast alluminium frame.<br>The weight of the High Bay fitting shall not be more than 8.0 kg. |
| 16 | Surge Protection | The Luminaire should have a 10kV SPD. The SPD should be able to sustain a minimum 15 hits of 5kA rating i.e. Total of 45 hits across all the three |

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| | | modes as per IEC 61000. |
| 17 | Electrical Protection | The Luminaire should be capable of withstanding voltage stress of 440V phase to phase for 8 hrs at 50 degree Celsius and should have low voltage protection as 100V for 48 hours & high voltage cut-off above 325 VAC and should have an auto restart feature. |
| 18 | Impact Resistance | IK08 |
| 19 | Driver Construction | The Drivers should be a potted driver not a printed circuit board without casing, mounted inside the luminaire.<br>The Driver shall be of constant current type and shall have Over voltage, Over current, Over temperature & Short circuit Protection.<br>The driver efficiency shall be more than 85%.<br>List of make of Driver: PHILLIPS Xitanium/ MEANWELL/ OSRAM/ BAG/ SOSEN/ INVENTRONICS.<br>Manufacturers can use their own make LED driver and the LED Driver shall be BIS certified and shall meet the specifications and comply with Safety requirements (IEC 61347-1, IEC 61347-2-13), EMC requirements (CISPR 15/ EN 55015, IEC/EN 61547, IEC/EN 61000-3-2, IEC/EN 61000-3-3). |
| 20 | Driver shall safety compliance | As per IEC 61347-1/ IS 15885 (Part2/ SEC13)/BIS certified |
| 21 | Ingress Protection Level of LED Light Fitting | IP 65 or more |
| 22 | Optics | As per Design |
| 23 | Material of optics | PC lens with toughened glass cover. The LEDs should be provided with UV resistant lens/glass cover for avoiding yellowing of the lense/glass cover.<br>Or Exposed lensed PC Lens plate, the LEDs should be provided with anti-dust, UV resistant exposed lens for avoiding any dust & dirt accumulation on the fixtures and yellowing of the lenses. |
| 24 | Makes of LEDs | Osram, Cree, Lumileds, Nichia, Seoul. |
| 25 | Specification of LED | SMD type with wattage of each LED should be > 1 Watt and ≤ 3 Watt. |
| 26 | Certificate/Report | (1) Type test reports for LED fittings & LED Driver.<br>(2) The luminaire should be tested as per IEC 60598 standards and following test reports should be submitted: Thermal Test, Ingress Protection Test, Electrical / Insulation Resistance Test, Endurance Test, Humidity Test. The luminaire should be tested for 'Drop test' as per IEC 60068-2-31/IS9000 Part 7 / Sec 3 standards. The |

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| | | luminaire should be tested for 'Vibration test' as per ANSI/IEC 68-2-6 standards.<br>(3) Should comply to IESNA LM-79 (Approved method for the Electrical and Photometric Measurements of Solid-State Lighting Products). LM79 report from NABL accredited laboratory.<br>(4) The LEDs used should comply to LM-80 standards (IESNA: Approved Method for Measuring Lumen Maintenance of LED Light Sources and LED lumen depreciation time to L70 based on LM-80 data).<br>(5) The LEDs shall comply with photo biological safety norms as per IEC 62471/EN 62471/IS:16108 under Risk Group 1 (Low Risk).<br>(6) BIS Certificate for LED Driver.<br>(7) BIS Certificate for LED Luminaire.<br>Contractor shall submit all the above certificate/report including BIS certificate (excluding LM79 report) for all LED light fitting at the time of supply of fittings. |

The rate shall be inclusive of all taxes (excluding GST), insurance, transportation, unloading at site as directed by Engineer in-Charge.

List of make of LED luminaire: Bajaj/ Philips/ Crompton/ C&S/ SYSKA/ WIPRO/ Pyrotech/ Surya/ Nessa/ Panasonic/ Havells/ Halonix/ Orient Electric/ WMEL.

**Field Test for LED High Bay Fittings:**

The Contractor shall carry out field test for the illumination level provided for Storage Sheds in the presence of Engineer in-Charge & TPIA. The lux level measurement shall be done by Third Party Inspection Agency (TPIA) (to be engaged & payment shall be made by DPA). The contractor shall prepare grid of 5m × 5m and mark the measuring points for measurement of lux level by the TPIA as directed by Engineer in-Charge.

The contractor shall demonstrate in the Field Test that their design achieves the average illumination level as below:

Illumination Level at inside Storage Shed – I & II:

An average illumination level shall not be less than 150 Lux on ground level in a grid of 5m × 5m with uniformity ratio (Emin/Eavg) of 0.40 and maintenance factor of 0.80 inside Storage Shed I & II. It is clarified that the measured average lux level at the time of Field Test shall not be less than 187.5 lux.

The illumination level shall be measured inside both Storage Shed – I & Shed – II in a size of 50m × 30m by making a grid of a 5m x 5m covering the entire area at ground level. The location of 50m × 30m inside Storage Shed I & II for the field test will be randomly selected by Engineer in-Charge.

In the event of illumination levels not found as per the requirement, the contractor shall have to carry out the work by replacing the LED high bay fittings installed with other wattage and/or make of LED high bay fittings, at the same locations where hangers are fixed/provided for the LED high bay fittings, at his own cost to complete the work within the stipulated time and as

per the requirement. Also, the contractor shall pay compensation to the Deendayal Port Authority for the assessed additional power consumption at an applicable Energy Charges per Unit as per the tariff order for DPA (The present tariff of Energy Charges is ₹5.55 per Unit). Deendayal Port Authority shall not pay anything extra to contractor to achieve the required illumination level. The compensation on account of extra energy consumption shall be calculated as below:

Compensation on account of extra energy consumption = Additional Power of LED High bay (kW) × 12 hours × 365 days × 10 years × (Energy Charges per Unit as per the tariff order for DPA).

**Technical Specification No. 87:**

This item includes installation, testing & commissioning of supplied LED high bay fitting. The LED high bay fitting shall be fixed on existing hanger by providing required length of SS 304 eye bolt & required accessories complete in all respect as directed by Engineer in-Charge. DPA will provide Hanger duly fixed in the Shed structure for mounting of the LED high bay fitting only. The work includes necessary wiring & connections of LED High Bay fitting from laid 3 core, 1.5 Sq.mm XLPE Copper Conductor Cable with 3 core Power Cable of LED High Bay fitting by providing IP65 Power Connector of minimum 10A rating as directed by Engineer in-Charge. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 88:**

The contractor shall supply at site LED High Bay fittings to achieve average illumination level of not less than 150 Lux on ground level of platform in grid of 5m × 5m with uniformity ratio (Emin/Eavg) of 0.40 and maintenance factor of 0.80 of Railway Track Platform of Dome shaped storage Shed – I & Shed – II. A drawing is enclosed at Annexure – II for reference. The lighting design at Railway Track Platform area shall comply with relevant IS standard with latest amendments.

The bidder shall submit their illumination design with following details:

(1) The bidder shall submit their common design of Railway Track Platform area for Storage Shed – I & II (750m × 5m) with single row of LED High Bay fittings.

(2) Width of the Platform Area of Shed – I & II shall be taken as 5m (Width – Y axis)

(3) Length of the Platform Area of Shed – I & II is 750m (Length – X axis)

(4) Position of LED High Bay fittings in width – Y axis of the Shed – I & II shall be 1.0 m.

(5) Position of LED High Bay fittings in length – X axis of the Shed – I & II: first fitting at 0.0m and thereafter subsequent fittings at an equal distance of 6.0m.

(6) The mounting height of the LED High Bay fitting (between Ground level of platform and surface of the LED High Bay fitting's glass) shall be between 4.5m to 4.8m.

(7) The reflection factor for the Floor, Ceiling & Wall shall be considered as 0.0.

(8) The size of grid shall not be less than 151×2 points.

The bidder shall submit their detailed design reports showing the illumination level with total quantity of fittings, maintenance factor & uniformity ratio in a grid of 5m×5m along with their bid document.

The bidder shall submit LM79 test reports of the offered LED High Bay fitting issued by any NABL accredited laboratory only for calculation of power consumption of the design along with the bid document.

The Technical Specifications of LED High Bay Fitting is as below:

| SR.NO. | DESCRIPTION | SPECIFICATION |
|---|---|---|
| 1 | Input Power of High Bay fitting | **To be offered by bidder** |
| 2 | Input voltage AC | 120-270 V AC |
| 3 | Input Frequency | 50 Hz +/-1 Hz |
| 4 | Life | 50,000 burning hours @ L70B50, Ta 35°C Outdoor |
| 5 | Mounting type | Eye bolt/Bracket for suspension mounting |
| 6 | Total Harmonic Distortion | <10% maximum |
| 7 | Working Temperature | 0°C to +45°C |
| 8 | Working Humidity | 10% to 90% RH |
| 9 | Temperature | 5700K to 6500K |
| 10 | Colour rendering index | >70 |
| 11 | Lumens / Watt | ≥ 120 Lumen/Watt at System Level |
| 12 | Finishing | Corrosion resistant powder coating |
| 13 | Power factor | Not less than 0.95 |
| 14 | Warranty | 5 Years from the date of successful commissioning.<br>It is clarified that during Warranty Period, if the material is found to be defective or has poor performance or has lumen depreciation beyond permissible limit as per LM80 report, the Contractor shall promptly, Replace the material against manufacturing defects /Rectify the material, on receiving the instruction from Engineer in-Charge at contractor's cost.<br>The contractor shall have final & total single point responsibility for performance of the LED light fittings supplied. |
| 15 | Construction | The housing should be of single piece non-corrosive powder coated pressure die-cast alluminium frame.<br>The weight of the High Bay fitting shall not be more than 6.0 kg. |
| 16 | Surge Protection | The Luminaire should have a 10kV SPD. The SPD should be able to sustain a minimum 15 hits of 5kA rating i.e. Total of 45 hits across all the three modes as per IEC 61000. |
| 17 | Electrical Protection | The Luminaire should be capable of withstanding voltage stress of 440V phase to phase for 8 hrs at 50 degree Celsius and should have low voltage protection as 100V for 48 hours & high voltage cut-off above 325 VAC and should have an auto restart feature. |
| 18 | Impact Resistance | IK08 |
| 19 | Driver Construction | The Drivers should be a potted driver not a printed circuit board without casing, mounted inside the |

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| | | luminaire.<br>The Driver shall be of constant current type and shall have Over voltage, Over current, Over temperature & Short circuit Protection.<br>The driver efficiency shall be more than 85%.<br>List of make of Driver: PHILLIPS Xitanium/ MEANWELL/ OSRAM/ BAG/ SOSEN/ INVENTRONICS.<br>Manufacturers can use their own make LED driver and the LED Driver shall be BIS certified and shall meet the specifications and comply with Safety requirements (IEC 61347-1, IEC 61347-2-13), EMC requirements (CISPR 15/ EN 55015, IEC/EN 61547, IEC/EN 61000-3-2, IEC/EN 61000-3-3). |
| 20 | Driver shall safety compliance | As per IEC 61347-1/ IS 15885 (Part2/ SEC13)/BIS certified |
| 21 | Ingress Protection Level of LED Light Fitting | IP 65 or more |
| 22 | Optics | As per Design |
| 23 | Material of optics | PC lens with toughened glass cover. The LEDs should be provided with UV resistant lens/glass cover for avoiding yellowing of the lense/glass cover.<br>Or Exposed lensed PC Lens plate, the LEDs should be provided with anti-dust, UV resistant exposed lens for avoiding any dust & dirt accumulation on the fixtures and yellowing of the lenses. |
| 24 | Makes of LEDs | Osram, Cree, Lumileds, Nichia, Seoul. |
| 25 | Specification of LED | SMD type with wattage of each LED should be > 1 Watt and ≤ 3 Watt. |
| 26 | Certificate/Report | (1) Type test reports for LED fittings & LED Driver.<br>(2) The luminaire should be tested as per IEC 60598 standards and following test reports should be submitted: Thermal Test, Ingress Protection Test, Electrical / Insulation Resistance Test, Endurance Test, Humidity Test. The luminaire should be tested for 'Drop test' as per IEC 60068-2-31/IS9000 Part 7 / Sec 3 standards. The luminaire should be tested for 'Vibration test' as per ANSI/IEC 68-2-6 standards.<br>(3) Should comply to IESNA LM-79 (Approved method for the Electrical and Photometric Measurements of Solid-State Lighting Products). LM79 report from NABL accredited laboratory.<br>(4) The LEDs used should comply to LM-80 standards (IESNA: Approved Method for Measuring Lumen Maintenance of LED Light Sources and LED lumen depreciation time to L70 based on LM-80 |

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| | | data).<br>(5) The LEDs shall comply with photo biological safety norms as per IEC 62471/EN 62471/IS:16108 under Risk Group 1 (Low Risk).<br>(6) BIS Certificate for LED Driver.<br>(7) BIS Certificate for LED Luminaire.<br>Contractor shall submit all the above certificate/report including BIS certificate (excluding LM79 report) for all LED light fitting at the time of supply of fittings. |

The rate shall be inclusive of all taxes (excluding GST), insurance, transportation, unloading at site as directed by Engineer in-Charge.

List of make of LED luminaire: Bajaj/ Philips/ Crompton/ C&S/ SYSKA/ WIPRO/ Pyrotech/ Surya/ Nessa/ Panasonic/ Havells/ Halonix/ Orient Electric/ WMEL.

**Field Test for LED High Bay Fittings:**

The Contractor shall carry out field test for the illumination level provided for Railway Track Platform Area in the presence of Engineer in-Charge & TPIA. The lux level measurement shall be done by Third Party Inspection Agency (TPIA) (to be engaged & payment shall be made by DPA). The contractor shall prepare grid of 5m × 5m and mark the measuring points for measurement of lux level by the TPIA as directed by Engineer in-Charge.

The contractor shall demonstrate in the Field Test that their design achieves the average illumination level as below:

Illumination Level at Railway Track Platform area of Shed – I & II:

An average illumination level shall not be less than 150 Lux on ground level of platform in grid of 5m × 5m with uniformity ratio (Emin/Eavg) of 0.40 and maintenance factor of 0.80 at Railway Track Platform area of Dome shaped storage Shed – I & II. It is clarified that the measured lux level at the time of Field Test shall not be less than 187.5 lux.

The illumination level shall be measured by making a grid of a 5m x 5m in total length of Shed – I.

The illumination level shall be measured in a size of 50m × 5m by making a grid of a 5m x 5m covering the entire area at ground level. The location of 50m × 5m at Shed – I or Shed – II for the field test will be randomly selected by Engineer in-Charge.

In the event of illumination level not found as per the requirement, the contractor shall have to carry out the work by replacing the LED High Bay fittings installed with other wattage and/or make of LED High Bay fittings, at the same locations, at his own cost to complete the work within the stipulated time and as per the requirement. Also, the contractor shall pay compensation to the Deendayal Port Authority for the assessed additional power consumption at an applicable Energy Charges per Unit as per the tariff order for DPA (The present tariff of Energy Charges is ₹5.55 per Unit). Deendayal Port Authority shall not pay anything extra to contractor to achieve the required illumination level. The compensation on account of extra energy consumption shall be calculated as below:

Compensation on account of extra energy consumption = Additional Power of LED High Bay fitting (kW) × 12 hours × 365 days × 10 years × (Energy Charges per Unit as per the tariff order for DPA).

**Technical Specification No. 89:**

This item includes installation, testing & commissioning of LED High Bay fitting for Railway Track Platform area. The LED High Bay fitting shall be fixed on a GI pipe bracket. The contractor shall supply & fix a GI Pipe Bracket at site. The GI pipe bracket shall be made from rectangle pipe of minimum size 40mm(W)×20mm(H)×1.2mm(T)×1050mm(L). Base plate shall be of size 80mm(W)×400mm(H)×2mm(T) with three holes suitable for fasteners of size M10 for mounting the GI pipe bracket. Other end of the bracket shall be provided with suitable hole for fixing the eye bolt of LED High Bay. The pipe bracket shall be provided with bracing at 300mm each of rectangle pipe & base plate by a pipe of size 20mm×20mm×1.2mm of length of approximately 425 mm. The Pipe Bracket shall be shop fabricated and the fabrication process shall include pressing, punching, slotting, drilling, welding etc. It shall be free from burr & sharp edges. The Pipe Bracket shall be hot dip galvanized as per relevant IS standard with minimum coating thickness of 120 microns. The Galvanising shall be done in single dipping method for better adhesion and life. The bracket manufacturing & galvanizing unit shall be ISO 9001: 2000 & ISO 14001 certified to ensure consistent quality & environmental protection. The contractor shall take prior approval of drawing from Engineer in-Charge before undertaking manufacturing of GI Pipe Bracket.

The GI pipe bracket shall be mounted on a RCC column structure with 3 nos. of anchor fasteners of size M10×100mm at a required height as per the illumination design. The LED High Bay fitting shall be fixed on the open end of the GI pipe bracket with SS304 Fasteners of required size as per installation manual of the LED Fitting's manufacturer and as directed by Engineer in-Charge. The work includes necessary wiring & connections of LED High Bay fitting from FRP JB with 3 core, 1.5 Sq.mm PVC insulated PVC sheathed Copper Flexible Cable. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 90:**

The contractor shall supply at site 200 ± 5% Watt energy efficient LED Flood Light Fitting as per the following Technical Specification:

| SR. NO. | DESCRIPTION | SPECIFICATION |
|---|---|---|
| 1 | Input Power | 200 ± 5% Watt |
| 2 | Input voltage AC | 120-270 V AC |
| 3 | Input Frequency | 50 Hz ± 1 Hz |
| 4 | Life | 50,000 burning hours @ L70B50, Ta 35°C Outdoor |
| 5 | Mounting type | Suitable for wall mounting with bracket |
| 6 | Total Harmonic Distortion | <10% maximum |
| 7 | Working Temperature | 0°C to +45°C |
| 8 | Working Humidity | 10% to 90% RH |
| 9 | Temperature | 5700K |
| 10 | Colour rendering index | >70 |
| 11 | Efficacy | ≥ 120 Lumen/Watt |
| 12 | Finishing | Corrosion resistant powder coating |
| 13 | Power factor | Not less than 0.95 |
| 14 | Warranty | 5 Years from the date of successful |

| | | |
|---|---|---|
| | | commissioning.<br>It is clarified that during Warranty Period, if the material is found to be defective or has poor performance or has lumen depreciation beyond permissible limit as per LM80 report, the contractor shall promptly, Replace the material against manufacturing defects /Rectify the material, on receiving the instruction from Engineer in Charge at contractor's cost.<br>The contractor shall have final & total single point responsibility for performance of the LED light fitting supplied. |
| 15 | Construction | The housing should be of single piece non-corrosive powder coated pressure die-cast aluminum frame with heat resistant toughened clear glass fixed with SS screw. The LED Flood Light shall have its make embossed/engraved on the Fitting. |
| 16 | Surge Protection | The Luminaire should have a 10kV SPD duly bolted inside the Luminaire. The SPD should be able to sustain a minimum 15 hits of 5kA rating i.e. Total of 45 hits across all the three modes as per IEC 61000. |
| 17 | Electrical Protection | The Luminaire should be capable of withstanding voltage stress of 440V phase to phase for 8 hrs. at 50 degree Celsius and should have low voltage protection as 100V for 48 hours & high voltage cut-off above 325 VAC and should have an auto restart feature. |
| 18 | Impact Resistance | IK08 |
| 19 | Driver Construction | The Drivers should be a potted driver not a printed circuit board without casing, mounted inside the luminaire.<br>The Driver shall be of constant current type and shall have Over voltage, Over current, Over temperature & Short circuit Protection.<br>The driver efficiency shall be more than 85%.<br>List of make of Driver: PHILLIPS Xitanium/ MEANWELL/ OSRAM/ BAG/ SOSEN/ INVENTRONICS.<br>Manufacturers can use their own make LED driver and the LED Driver shall be BIS certified and shall meet the specifications and comply with Safety requirements (IEC 61347-1, IEC 61347-2-13), EMC requirements (CISPR 15/ EN 55015, IEC/EN 61547, IEC/EN 61000-3-2, IEC/EN 61000-3-3). |
| 20 | Driver shall safety compliance | As per IEC 61347-1/ IS 15885 (Part2/ SEC13)/BIS certified |
| 21 | Ingress Protection Level of LED Light Fitting | IP 65 or more |

| | | |
|---|---|---|
| 22 | Optics | Asymmetric Wide or Wide Beam Angle |
| 23 | Material of optics | PC lens with toughened glass cover. The LEDs should be provided with UV resistant lens/glass cover for avoiding yellowing of the lense/glass cover.<br>Or Exposed lensed PC Lens plate, the LEDs should be provided with anti-dust, UV resistant exposed lens for avoiding any dust & dirt accumulation on the fixtures and yellowing of the lenses. |
| 24 | Makes of LEDs | Osram, Cree, Lumileds, Nichia, Seoul. |
| 25 | Specification of LED | SMD type with wattage of each LED should be > 1 Watt and ≤ 3 Watt. |
| 26 | Certificate/Report | (1) Type test reports for LED fitting & LED Driver.<br>(2) Should comply to IESNA LM-79 (Approved method for the Electrical and Photometric Measurements of Solid-State Lighting Products). LM79 report from any NABL accredited laboratory.<br>(3) The LEDs used should comply to LM-80 standards (IESNA: Approved Method for Measuring Lumen Maintenance of LED Light Sources and LED lumen depreciation time to L70 based on LM-80 data).<br>(4) BIS Certificate for LED Driver.<br>(5) BIS Certificate for LED Luminaire.<br>Contractor shall submit all the above certificate/report including BIS certificate (excluding LM79 report) for all LED light fitting at the time of supply of fittings. |

The rate shall be inclusive of all taxes (excluding GST), insurance, transportation, unloading at site as directed by Engineer in-Charge.

List of make of LED Luminaire: Bajaj/ Philips/ Crompton/ C&S/ SYSKA/ WIPRO/ Pyrotech/ Surya/ Nessa/ Panasonic/ Havells/ Halonix/ Orient Electric/ WMEL.

**Technical Specification No. 91:**

This item covers fixing and commissioning of 200 ±5% Watt LED Flood Light Fitting. The LED Flood Light fitting shall be fixed on wall/structure at a height of approximately 7m of dome shaped Storage Shed as directed by the Engineer in-Charge. The LED flood light fitting shall be fixed on Wall/RCC structure with required size of anchor fasteners as per installation manual of the LED Fitting's manufacturer and as directed by Engineer in-Charge. The work includes necessary wiring & connections of LED flood light fitting from FRP JB with 3 core, 1.5 Sq.mm PVC insulated PVC sheathed Copper Flexible Cable. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 92:**

This item includes preparation of maintenance free earth station by providing 80mm diameter, 3 meter, 100 micron hot dipped GI chemical electrode with back fill compound including accessories & masonry work. A cement concrete (ratio 1:4:8) chamber of 500 mm × 500 mm × 500mm ×

50mm (thickness of wall) shall be prepared and a cover of suitable size shall be provided for the chamber. The work shall be carried out to entire satisfaction of Engineer in-Charge. This work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 93:**

This item includes preparation of maintenance free earth station by providing 60mm diameter, 3 meter, 100 micron hot dipped GI chemical electrode with back fill compound including accessories & masonry work. A cement concrete (ratio 1:4:8) chamber of at least 500 mm × 500 mm × 500mm × 50mm (thickness of wall) shall be prepared and a cover of suitable size shall be provided for the chamber. The work shall be carried out to entire satisfaction of Engineer in-Charge. This work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 94:**

This item includes preparation of maintenance free earth station by providing 80mm diameter, 3 meter, 250 micron Copper bonded chemical electrode with back fill compound including accessories & masonry work. A cement concrete (ratio 1:4:8) chamber of at least 500 mm × 500 mm × 500mm × 50mm (thickness of wall) shall be prepared and a cover of suitable size shall be provided for the chamber. The work shall be carried out to entire satisfaction of Engineer in-Charge. This work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 95:**

This item includes supply at site, laying, fixing and connecting of Copper strip of size 50×5 mm from earth station to Distribution Transformer as directed. The copper strip shall be laid from earth station to Distribution and shall be clamped suitably on wall/floor or buried in the ground/ trench as directed. This work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 96:**

This item includes supply at site, laying, fixing and connection of GI strip of size 50x6 mm from earth station to HT RMU Panel/ Distribution Transformer/ LT Distribution Panel/ LT Load Point Panel/LT Distribution Board as directed. The GI strip shall be laid and clamped suitably on wall/floor/structure or buried in the ground as directed. This work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 97:**

This item includes supply at site, laying, fixing and connection of GI strip of size 25×6 mm. The GI strip shall be laid and clamped suitably on wall/floor/structure. The strip shall be connected with the earth station. The GI Saddle clamps shall be provided of size 20mm×2mm with suitable size of heavy duty screws for clamping as directed. The GI strip shall be laid on wall/structure with clamps at a height parallel to the cable tray/cable wall clamping as directed by Engineer in-Charge. The clamp shall be fixed rigidly on wall/structure at 0.5m intervals. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 98:**

This item includes supply at site, laying, fixing and connection of 8 SWG GI Wire between GI strip of size 25×6 mm to earthing terminal of FRP Junction Box as directed. The GI Wire shall be laid and clamped suitably on wall/structure at height as directed. The work includes all material, labour, scaffolding, tools & tackles as directed by Engineer in-Charge.

**Technical Specification No. 99:**

This item covers shifting of old existing 1000kVA, 11/0.433kV ONAN indoor type Distribution Transformer from Old NDA Substation, inside Cargo Jetty Area to Main Store, outside Cargo Jetty Area. The contractor shall carry out loading, transportation and unloading of the Distribution Transformer. The work includes all material, labour, tools & tackles as directed by Engineer in-Charge.

**Signature & Seal of Contractor**

**Executive Engineer (E)**
**Deendayal Port Authority**

## SECTION VI

## Bill of Quantity

Name of Work: Construction of new Godowns in place of existing Godown No. 19 to 21 & 25 inside Cargo Jetty area – Electrification Work

| Sr. No. | Description | Qty. | Unit | Rate | Amount |
|---|---|---|---|---|---|
| 1 | Supply at site 5 way, 11kV Gas Insulated RMU as per Technical Specification No. 1 | 1 | No. | | |
| 2 | Installation, testing & commissioning of 5 way, 11kV Gas Insulated RMU as per Technical Specification No. 2 | 1 | No. | | |
| 3 | Supply at site 3 core, 150 Sq. mm HT armoured aluminium conductor XLPE cable of 11kV grade as per IS: 7098 (Part - II) 1988 & as per Technical Specification No. 3 | 70 | m | | |
| 4 | Laying, Testing & Commissioning of 3 core, 150 Sq. mm HT XLPE cable in existing Cable Trench as per Technical Specification No. 4 | 70 | m | | |
| 5 | Supply at site Indoor type Heat shrink end termination kit for 3 core, 150 Sq. mm 11kV XLPE aluminium cable as per Technical Specification No. 5 | 5 | No. | | |
| 6 | Fixing of Indoor type Heat shrink end termination kit for 3 core, 150 Sq. mm 11kV XLPE aluminium cable as per Technical Specification No. 6 | 5 | No. | | |
| 7 | Supply at site Heat shrink straight through joint kit for 11kV, 3 core, 150 Sq. mm XLPE aluminium cable as per Technical Specification No. 7 | 1 | No. | | |
| 8 | Fixing of Heat shrink straight through joint kit for 11kV, 3 core, 150 Sq. mm XLPE aluminium cable as per Technical Specification No. 8 | 1 | No. | | |
| 9 | Supply at site 630kVA, 11/0.433kV, Dyn11, ONAN Indoor type Distribution Transformer as per Technical Specification No. 9 | 1 | No. | | |
| 10 | Installation, Testing & Commissioning of 630kVA, | 1 | No. | | |

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| | 11/0.433kV, Dyn11, ONAN Indoor type Distribution Transformer as per Technical Specification No. 10 | | | | |
| 11 | Supply at site 6-way LT Power Distribution Panel as per Technical Specification No. 11 | 1 | No. | | |
| 12 | Installation, Testing & Commissioning of 6-way LT Power Distribution Panel as per Technical Specification No. 12 | 1 | No. | | |
| 13 | Supply at site 1.1kV Single Core 1000 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable as per Technical Specification No. 13 | 70 | m | | |
| 14 | Supply at site 1.1kV Single Core 1000 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable as per Technical Specification No. 14 | 70 | m | | |
| 15 | Supply at site 1.1kV Single Core 1000 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable as per Technical Specification No. 15 | 70 | m | | |
| 16 | Supply at site 1.1kV Single Core 1000 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable as per Technical Specification No. 16 | 70 | m | | |
| 17 | Supply at site 4 Core, 300 Sq.mm, 1.1kV grade LT armoured aluminium conductor XLPE cable as per Technical Specification No. 17 | 350 | m | | |
| 18 | Supply at site 4 Core, 240 Sq.mm, 1.1kV grade LT armoured aluminium conductor XLPE cable as per Technical Specification No. 18 | 900 | m | | |
| 19 | Supply at site 4 Core, 50 Sq.mm, 1.1kV grade LT armoured aluminium conductor XLPE cable as per Technical Specification No. 19 | 3200 | m | | |
| 20 | Supply at site 4 Core, 6 Sq.mm, 1.1kV grade LT armoured aluminium conductor XLPE cable as per Technical Specification No. 20 | 8500 | m | | |
| 21 | Supply at site 3 core, 1.5 Sq.mm, 1.1kV grade LT armoured Copper conductor XLPE cable as per Technical Specification No. 21 | 7000 | m | | |
| 22 | Supply of 1000mm width hot dip galvanized ladder type cable tray | 60 | m | | |

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| | along with its accessories as per Technical Specification No. 22 | | | | |
| 23 | Supply of 1000mm width hot dip galvanized Vertical Inside Riser as per Technical Specification No. 23 | 2 | No. | | |
| 24 | Supply of 1000mm width hot dip galvanized Vertical Outside Riser as per Technical Specification No. 24 | 2 | No. | | |
| 25 | Supply of 800mm width hot dip galvanized ladder type cable tray along with its accessories as per Technical Specification No. 25 | 165 | m | | |
| 26 | Supply of 600mm width hot dip galvanized ladder type cable tray along with its accessories as per Technical Specification No. 26 | 30 | m | | |
| 27 | Supply of 500mm width hot dip galvanized ladder type cable tray along with its accessories as per Technical Specification No. 27 | 270 | m | | |
| 28 | Supply of 500mm width hot dip galvanized Vertical Inside Riser as per Technical Specification No. 28 | 2 | No. | | |
| 29 | Supply of 500mm width hot dip galvanized Vertical Outside Riser as per Technical Specification No. 29 | 2 | No. | | |
| 30 | Supply of 400mm width hot dip galvanized ladder type cable tray along with its accessories as per Technical Specification No. 30 | 585 | m | | |
| 31 | Supply of 400mm width hot dip galvanized Vertical Inside Riser as per Technical Specification No. 31 | 6 | No. | | |
| 32 | Supply of 400mm width hot dip galvanized Vertical Outside Riser as per Technical Specification No. 32 | 6 | No. | | |
| 33 | Supply at site 1200mm Cantilever Bracket for cable tray as per Technical Specification No. 33 | 60 | No. | | |
| 34 | Supply at site 1000mm Cantilever Bracket for cable tray as per Technical Specification No. 34 | 165 | No. | | |
| 35 | Supply at site 800mm Cantilever Bracket for cable tray as per Technical Specification No. 35 | 30 | No. | | |
| 36 | Supply at site 700mm Cantilever Bracket for cable tray as per | 270 | No. | | |

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| | Technical Specification No. 36 | | | | |
| 37 | Supply at site 600mm Cantilever Bracket for cable tray as per Technical Specification No. 37 | 585 | No. | | |
| 38 | Fixing of 1200mm Cantilever Bracket as per Technical Specification No. 38 | 60 | No. | | |
| 39 | Fixing of 1000mm Cantilever Bracket as per Technical Specification No. 39 | 165 | No. | | |
| 40 | Fixing of 800mm Cantilever Bracket as per Technical Specification No. 40 | 30 | No. | | |
| 41 | Fixing of 700mm Cantilever Bracket as per Technical Specification No. 41 | 270 | No. | | |
| 42 | Fixing of 600mm Cantilever Bracket as per Technical Specification No. 42 | 585 | No. | | |
| 43 | Fixing of 1000mm width hot dip galvanized ladder type cable tray along with its accessories as per Technical Specification No. 43 | 60 | m | | |
| 44 | Fixing of 1000mm width hot dip galvanized Vertical Inside Riser as per Technical Specification No. 44 | 2 | No. | | |
| 45 | Fixing of 1000mm width hot dip galvanized Vertical Outside Riser as per Technical Specification No. 45 | 2 | No. | | |
| 46 | Fixing of 800mm width hot dip galvanized ladder type cable tray along with its accessories as per Technical Specification No. 46 | 165 | m | | |
| 47 | Fixing of 600mm width hot dip galvanized ladder type cable tray along with its accessories as per Technical Specification No. 47 | 30 | m | | |
| 48 | Fixing of 500mm width hot dip galvanized ladder type cable tray along with its accessories as per Technical Specification No. 48 | 270 | m | | |
| 49 | Fixing of 500mm width hot dip galvanized Vertical Inside Riser as per Technical Specification No. 49 | 2 | No. | | |
| 50 | Fixing of 500mm width hot dip galvanized Vertical Outside Riser as per Technical Specification No. 50 | 2 | No. | | |

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| 51 | Fixing of 400mm width hot dip galvanized ladder type cable tray along with its accessories as per Technical Specification No. 51 | 585 | m | | |
| 52 | Fixing of 400mm width hot dip galvanized Vertical Inside Riser as per Technical Specification No. 52 | 6 | No. | | |
| 53 | Fixing of 500mm width hot dip galvanized Vertical Outside Riser as per Technical Specification No. 53 | 6 | No. | | |
| 54 | Laying double run of 1.1kV 1 Core 1000 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable through Existing Substation Trench as per Technical Specification No. 54 | 140 | m | | |
| 55 | Laying of double run of 1.1kV 4 Core 300 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable through Existing Trench of Substation as per Technical Specification No. 55 | 40 | m | | |
| 56 | Laying of double run of 1.1kV 4 Core 300 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable through Existing RCC Trench as per Technical Specification No. 56 | 40 | m | | |
| 57 | Laying of double run of 1.1kV 4 Core 300 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable in Cable Tray as per Technical Specification No. 57 | 42 | m | | |
| 58 | Laying of double run of 1.1kV 4 Core 300 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable in Vertical Cable Tray as per Technical Specification No. 58 | 10 | m | | |
| 59 | Laying of double run of 1.1kV 4 Core 300 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable as Loop as per Technical Specification No. 59 | 10 | m | | |
| 60 | Laying of double run of 1.1kV 4 Core 240 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable through Existing Trench of Substation as per | 40 | m | | |

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| | Technical Specification No. 60 | | | | |
| 61 | Laying of double run of 1.1kV 4 Core 240 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable through Existing RCC Trench as per Technical Specification No. 61 | 40 | m | | |
| 62 | Laying of double run of 1.1kV 4 Core 240 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable in Cable Tray as per Technical Specification No. 62 | 216 | m | | |
| 63 | Laying of double run of 1.1kV 4 Core 240 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable in Vertical Cable Tray as per Technical Specification No. 63 | 10 | m | | |
| 64 | Laying of double run of 1.1kV 4 Core 240 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable through existing NP2 Pipe as per Technical Specification No. 64 | 80 | m | | |
| 65 | Laying of double run of 1.1kV 4 Core 240 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable as Loop as per Technical Specification No. 65 | 10 | m | | |
| 66 | Laying of 1.1kV 4 Core 50 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable in Cable Tray as per Technical Specification No. 66 | 2622 | m | | |
| 67 | Laying of 1.1kV 4 Core 50 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable in Vertical Cable Tray as per Technical Specification No. 67 | 96 | m | | |
| 68 | Laying of 1.1kV 4 Core 50 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable as Loop as per Technical Specification No. 68 | 160 | m | | |
| 69 | Laying of 1.1kV 4 Core 6 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable in Cable Tray as per Technical Specification | 3850 | m | | |

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|---|---|---|---|---|---|
| | No. 69 | | | | |
| 70 | Laying of 1.1kV 4 Core 6 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable in Vertical Cable Tray as per Technical Specification No. 70 | 426 | m | | |
| 71 | Laying of 1.1kV 4 Core 6 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable through existing NP2 Pipe as per Technical Specification No. 71 | 180 | m | | |
| 72 | Laying of 1.1kV 4 Core 6 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable through Clamping on RCC Structure as per Technical Specification No. 72 | 2149 | m | | |
| 73 | Laying of 1.1kV 4 Core 6 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable through existing Hangers in dome shaped roof structure as per Technical Specification No. 73 | 560 | m | | |
| 74 | Laying of 1.1kV 4 Core 6 Sq.mm Aluminium Conductor XLPE Insulated Armoured Cable as Loop as per Technical Specification No. 74 | 930 | m | | |
| 75 | Laying of 3 core, 1.5 Sq.mm, Copper Conductor XLPE Insulated Armoured Cable on RCC Structure through clamps as per Technical Specification No. 75 | 165 | m | | |
| 76 | Laying of 3 core, 1.5 Sq.mm, Copper Conductor XLPE Insulated Armoured Cable through existing hangers provided in dome shaped roof structure as per Technical Specification No. 76 | 6600 | m | | |
| 77 | Laying of 3 core, 1.5 Sq.mm, Copper Conductor XLPE Insulated Armoured Cable as Loop as per Technical Specification No. 77 | 165 | m | | |
| 78 | Supply at site LT Load Point Panel (Type – 1) as per Technical Specification No. 78 | 1 | No. | | |
| 79 | Supply at site LT Load Point Panel (Type – 2) as per Technical Specification No. 79 | 1 | No. | | |

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|---|---|---|---|---|---|
| 80 | Supply at site FRP 8-Way Power Distribution Board as per Technical Specification No. 80 | 16 | No. | | |
| 81 | Installation, Testing & Commissioning of LT Load Point Panel (Type – 1) as per Technical Specification No. 81 | 1 | No. | | |
| 82 | Installation, Testing & Commissioning of LT Load Point Panel (Type – 2) as per Technical Specification No. 82 | 1 | No. | | |
| 83 | Installation, Testing & Commissioning of FRP 8-Way Power Distribution Board as per Technical Specification No. 83 | 16 | No. | | |
| 84 | Supply at site FRP Junction Box as per Technical Specification No. 84 | 425 | No. | | |
| 85 | Fixing of FRP Junction Box as per Technical Specification No. 85 | 425 | No. | | |
| 86 | Supply at site LED High Bay fitting for inside Shed Area as per Technical Specification No. 86 | 330 | No. | | |
| 87 | Installation, Testing & Commissioning of LED High Bay fitting as per Technical Specification No. 87 | 330 | No. | | |
| 88 | Supply at site LED High Bay fitting for Platform Area as per Technical Specification No. 88 | 252 | No. | | |
| 89 | Installation, Testing & Commissioning of LED High Bay fitting with GI Pipe Bracket as per Technical Specification No. 89 | 252 | No. | | |
| 90 | Supply at site LED Flood Light fitting as per Technical Specification No. 90 | 63 | No. | | |
| 91 | Installation, Testing & Commissioning of LED Flood Light fitting as per Technical Specification No. 91 | 63 | No. | | |
| 92 | Preparation of earthing system with 80mm diameter, 3m GI electrode & chemical back fill compound as per Technical Specification No. 92 | 6 | No. | | |
| 93 | Preparation of earthing system with 60mm diameter, 3m GI electrode & chemical back fill compound as per Technical Specification No. 93 | 36 | No. | | |
| 94 | Preparation of earthing system with copper chemical electrode & back fill compound for transformer | 2 | No. | | |

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| | earthing as per Technical Specification No. 94 | | | | |
| 95 | Supply, Laying, connecting of Copper Strip of 50×5 mm size between earth station to neutral of Transformer as per Technical Specification No. 95 | 20 | m | | |
| 96 | Supply, Laying, connecting of GI Strip of 50×6 mm size between earth station to the equipment as per Technical Specification No. 96 | 460 | m | | |
| 97 | Supply, Laying, connecting of GI Strip of 25×6 mm size as per Technical Specification No. 97 | 2660 | m | | |
| 98 | Supply, Laying, connecting of GI Wire of 8 SWG size as per Technical Specification No. 98 | 560 | m | | |
| 99 | Shifting of old 1000kVA 11/0.433kV Indoor Type Distribution Transformer as per Technical Specification No. 99 | 1 | No. | | |
| Total | | | | | |

(In words Rupees _____ only)

(NOTE: The rates should be inclusive of all taxes, duties, fees, cess etc. and all incidental charges; but exclusive of GST).

**Signature & Seal of Contractor**

**Executive Engineer (E)**
**Deendayal Port Authority**

## SECTION – VII

| Approved Make List of Electrical Items | | |
|---|---|---|
| **Sr. No.** | **Description** | **Recommended Makes** |
| 1 | HV VCB | SIEMENS/CROMPTON GREAVES/ABB/Schneider |
| 1(a) | HV Gas Insulated Breakers | SIEMENS /Schneider/ABB |
| 2 | POWER TRANSFORMERS | VOLTAMP/CROMPTON GREAVES /BHARAT BIJLEE/ BHEL/ SIEMENS/ABB/ Schneider/T&R |
| 3 | DISTRIBUTION TRANSFORMERS | EMCO/KIRLOSKAR/PATSON/VOLTAMP/ABB/Schneider/T&R |
| 4 | RESIN CAST TRANSFORMERS | |
| | A) RESIN CAST IMPREGNATED | VOLTAMP / KIRLOSKAR / EMCO |
| | B) DRY CAST | VOLTAMP/KIRLOSKAR/EMCO |
| 5 | HT XLPE CABLES | POLYCAB/ TORRENT/ RPG ASIAN/ GLOSTER/ UNISTAR |
| 6 | LT XLPE CABLES | POLYCAB/TORRENT/RPG ASIAN/ RALLISON/PRIMECAB/ HAVELLS/ UNISTAR/AVOCAB/ALLCAB/ADCAB |
| 7 | LT ACB | SIEMENS/L&T/SCHNEIDER/C&S |
| 8 | PROTECTION RELAYS | AREVA/L&T/SIEMENS/ABB/C&S |
| 9 | LT PANEL | CPRI APPROVED |
| 10 | CHANGE OVER SWITCH | SIEMENS/L&T/ABB/C&S/SCHNIDER/ LEGRAND / INDOASIAN |
| 11 | SFU FOR MAIN LT DISTRIBUTION PANELS | SIEMENS/L&T/ABB/C&S |
| 12 | SFU FOR DISTRIBUTION PANELS & FEEDER PILLERS | SIEMENS/L&T/ABB/C&S/ SCHNEIDER/ LEGRAND/ INDOASIAN/HAVELLS |
| 13 | MCCB FOR MAIN LT DISTRIBUTION PANELS | SIEMENS/L&T/ABB |
| 14 | MCCB FOR DISTRIBUTION PANELS AND FEEDER PILLERS | SIEMENS/L&T/ABB/C&S/ SCHNIDER/ LEGRAND/ INDOASIAN/HAVELLS |
| 15 | MCB/ELCB/RCCB/ RCCBO FOR MAIN LT DISTRIBUTION PANELS | SIEMENS/HAGER L&T/ABB |
| 16 | MCB FOR DISTRIBUTION PANELS AND FEEDER PILLERS | SIEMENS/L&T/ABB/C&S/ SCHNEIDER/ LEGRAND/ INDOASIAN/ HAVELLS/ STANDARD |
| 17 | MCB DISTRIBUTION BOARD | STANDARD / HENSEL/LEGRAND / INDOASIAN / HAVELLS |

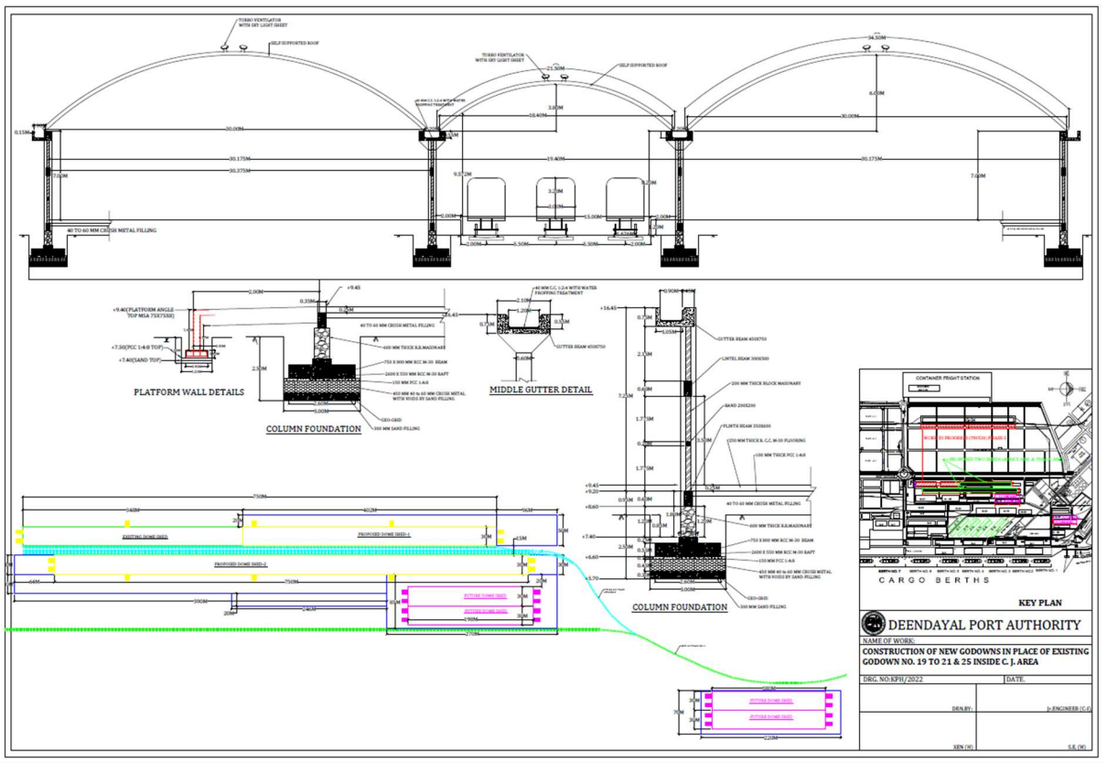
| | | |
|---|---|---|
| 18 | MULTI FUNCTION DIGITAL METER FOR MAIN LT DISTRIBUTION PANELS/DIGITAL KWH METERS | L&T/ENERCON/SECURE/L&G/ RISHABH |
| 19 | ANALOG VOLT/AMPARE METER FOR DISTRIBUTION PANELS AND FEEDER PILLERS | RISHABH/AE/ENERCON/L&T |
| 20 | SLECTOR SWITCH FOR VOLTMETER/AMPARE METER | L&T/SIEMENS/C&S |
| 21 | POWER CONTACTOR & OVER LOAD RELAYS | L&T/SIEMENS/ABB |
| 22 | QUARTZ TIME CLOCK SWITCH | L&T/INDOASIAN/SIEMENS |
| 23 | PVC WIRE WITH COPPER CONDUCTOR | RRKABEL/KEI/POLYCAB/MILEX/GUJCAB/ STANDARD/ FINOLEX/ ANCHOR |
| 24 | FLUSH TYPE SWITCHES, SOCKETS, HOLDERS AND CEILING ROSES & ELECTRONIC REGULATORS | ANCHOR/MK/NORTHWEST/VINAY/PANAMA/HAVELLS |
| 25 | DOOR BELLS/CALL BELLS | ANCHOR/LEGEND/MK/NORTHWEST |
| 26 | MODULAR SWITCHES, SOCKETS, PLATES & BOXES | ANCHOR / MK / NORTHWEST / LEGRAND /HAVELLS/ INDOASIAN/ SIEMENS |
| 27 | PVC CONDUIT/OVAL CONDUIT & CASSING CAPPING AND ACCESSORIES | PRECISION/VULCAN/FINOLEX/ GARWARE/ RESTOPLAST/ SWASTIK/ BPI |
| 28 | GLS LAMPS & FLUORESCENT LAMPS | PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE |
| 29 | HPSV, HPMV & METAL HELIDE LAMPS | PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE |
| 30 | IGNITORS FOR HPSV, METAL HELIDE LAMPS | PHILIPS / BAJAJ / WIPRO / CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE |
| 31 | LUMINARIES | PHILIPS/BAJAJ/WIPRO/CROMPTON GREAVES / OSRAM / SURYA ROSHNI /GE |
| 31a | LED Luminaries | Philips /Bajaj/Wipro/CG/Surya/Pyrotech/Syska/Nessa having surge Protection ≥10KV for fittings & internal Surge protection for Driver of≥4KV, LED Chip only OSRAM/CREE/Philips Lumileds/Citizen/Nicia with LM-79,80 CERTIFICATION |
| 32 | CEILING FANS | BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC |

| | | |
|---|---|---|
| 33 | WALL MOUNTING FANS | BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC |
| 34 | EXHUAST FANS | BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC |
| 35 | HEAVY DUTY INDUSTRIAL WALL MOUNTING FANS | BAJAJ/ORIENT/USHA/CROMPTON GREAVES / ALMONARD/GEC |
| 36 | WATER COOLER | VOLTAS/SHRIRAM USHA/BLUE STAR |
| 37 | AIR CONDITIONERS | VOLTAS/CARRIER/BLUESTAR/USHA/ HITACHI/LG/ SAMSUNG/ONIDA |
| 38 | REFRIGERATORS | VOLTAS/CARRIER/BLUESTAR/USHA/ HITACHI/LG/ SAMSUNG/WHIRLPOOL |
| 39 | VOLTAGE STABILIZER | VEELINE / CAPRI |
| 40 | INVERTERS | SUKAM / MICROTEK |
| 41 | D.G. SETS<br>(a) ENGINE<br>(b) ALTERNATOR | CUMMINS/GREAVES/KIRLOSKAR/ CATERPILLAR/ ASHOK LEYLAND/VOLVO<br><br>STAMFORD/CROMPTON GREAVES /JYOTI/ KIRLOSKAR ELECTRIC |
| 42 | ELECTRIC MOTOR | ALSTOM/CROMPTON GREAVES /SIEMENS/ KIRLOSKAR/ABB |
| 43 | WATER PUMPS | SWASTIK / KSB |
| 44 | WATER GEYSER | BAJAJ/USHA / CROMPTON GREAVES / SPHEREHOT / RACOLD |
| 45 | LUGS & CABLE GLANDS | DOWELLS / JAINSON / BRACO |

## SECTION – VIII

## DRAWING

Drawing of Storage Shed in place of existing Godowon No. 19 to 21 & 25 inside C.J. Area:




**Signature & Seal of Contractor**

**Executive Engineer (E)**
**Deendayal Port Authority**

## SECTION – IX

## Format for submitting information for Bid Capacity

**Annexure – A**

| Sr. No. | Financial Year | Value of work undertaken | Multiplying factor | Value updated to the price level of the year (Col 3 x col 4) |
|---|---|---|---|---|
| A | B | C | E | F |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |

**Annexure – B**

| Sr. No. | Name of client | Name of work | Work order no. and date | Schedule period of completion as per work order with start date | Contract value | Value of work done | Remaining value of work done | Anticipated date of completion | Remaining value of work done for 06 months from the date of opening of preliminary bid of opening of preliminary bid |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

**Signature & Seal of Contractor**

## SECTION – X

## INTEGRITY PACT

**Between**

**Deendayal Port Authority (DPA)** hereinafter referred to as **"The Principal"**

And

..... (Name of The bidders and consortium members) hereinafter referred to as **"The Bidder / Contractor"**

### Preamble

The Principal intends to award, under laid down organizational procedures, contract(s) / concession(s) for Tender No. EL/AC/2776. The Principal values full compliance with all relevant laws of the land rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs), 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 for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

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

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

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC / PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

**Section 2 - Commitments of the Bidder(s) / Contractor(s)**

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

a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in tender process or the execution of the contract or to any third person any material or other benefit, which he / she is not legally entitled to, in order to obtain in exchange of advantage of any kind whatsoever during the tender process or during the execution of the

contract.

b. The Bidder(s) / Contractor(s) 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 cartelization in the bidding process.

c. The Bidder(s) / Contractor(s) will not commit any offence, under the relevant Prevention of Corruption Act / Indian Penal Code / PC Act; further the Bidder(s) / Contractor(s) 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(s) / Contractor(s) of foreign origin shall disclose the name andaddress of the Agents / Representatives in India, if any. Similarly, the Bidder(s) / Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to Indian agent / representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed at (page Nos. 129-139)

e. The Bidder(s) / Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries, in connection with the award of the contract.

f. Bidder(s) / Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.

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

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

If the Bidder(s) / Contractor(s), before award or during execution has committed a transgression through a violation of Section-2 above, or in any other form, such as to put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder (s) / Contractor(s), from the tender process, or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". Copy of the "Guidelines on Banning of business dealings" is placed at (Page No. 129 to 139).

**Section 4 - Compensation for Damages**

(1) If the Principal has disqualified the Bidder(s), from the tender process prior to the award, according to Section 3, the Principal is entitled to demand and recover the 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 Principalshall be entitled to demand and recover from the Contractor, liquidated damagesof the Contract Value or the amount equivalent to Security Deposit / Performance Bank Guarantee, whichever is higher.

(3) The Bidder(s) agrees and undertakes to pay the said amounts, without protest or demur, subject only to condition that, if the Bidder(s) / Contractor(s) can prove and

establish that 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 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 transgressions occurred in the last three years with any other company in any country confirming to the anti-corruption approach or with any other Public Sector Enterprises 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 action can be taken as per the procedure mentioned in "Guidelines on Banning of Business dealing".

**Section 6 - Equal treatment of all Bidders / Contractors**

(1) In case of a Joint Venture, all the partners of the Joint Venture will enter into agreement with identical conditions as this on which all Bidders.

(2) There is no provision of sub-contract in the tender, any violation of the same, Contractor shall be held solely responsible for the same.

**Section 7 - Criminal charges against violating Bidders / Contractors**

If the principal obtains knowledge of conduct of a Bidder or Contractor or of an employee, or a representative, or an associate of a Bidder or Contractor, which constitutes corruption, or if the Principal has substantive suspicion, in this regard, the Principal will inform the same to the Chief Vigilance Officer (CVO) and the CVO will takefurther necessary action as deemed fit in accordance with the CVC Manual.

**Section 8 - External Independent Monitor**

(1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. 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 representative of the parties and performs his / her functions neutrally and independently. The Monitor would have access to all Contact documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders / Contractors as confidential. He / she reports to the Chairperson of the Board of the Principal.

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

(4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) with confidentiality. The Monitor has also signed declaration on "Non-Disclosure of Confidential Information" and of "Absence of Conflict of Interest". In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, DPA and recues himself / herself fromthat case.

(5) The Principal will provide to the Monitor sufficient information about all meetingsamong

Construction of new Godowns in place of existing Godown No. 19 to 21 & 25 inside Cargo Jetty area – Electrification Work

the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Bidder / Contactor. The parties offer to the Monitor the option to participate in such meetings.

(6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he / she will so inform the Management of the Principal and request the management to discontinue, or take corrective action. The Monitor can inthis regard submit non-binding recommendations. 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.

(7) 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 bythe Principal and, should the occasion arise, submit proposals for correcting problematic situations.

(8) If the Monitor has reported to the Chairperson of the Board of the Principal, a substantiated suspicion of an offence under relevant IPC / PC Act and the Chairperson of the Board of the Principal has not, within reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

(9) The word "**Monitor**" would include both singular and plural.

**Section 9 - Pact Duration**

9.1 This Pact shall be operative from the date of signing of IP by both the parties till the final completion of contract of successful bidder and for all other bidders six months after the contract has been awarded. Issues like warranty, guarantee, etc. should be outside the purview of IEMs.

9.2 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 the Chairperson, DPA.

**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. Gandhidham, Gujarat.

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

(3) If the Bidder / Contractor is a partnership or a consortium, this agreement mustbe signed by all partners or consortium members.

(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 intensions.

(5) Issues like Warranty / Guarantee etc. shall be outside the purview of IEMs.

(6) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the Integrity Pact will prevail.

(For & on behalf of the Principal)

अधिशासी अभियंता (विद्युत)
दीनदयाल पत्तन प्राधिकरण
Executive Engineer (Elect.)
Deendayal Port Authority

(For & on behalf of the Bidder/Contractor)



Page **129** of **141**

Construction of new Godowns in place of existing Godown No. 19 to 21 & 25 inside Cargo Jetty area – Electrification Work

(Office Seal)

Signature of Witness:

(Name & Address)

N.K. Solanki
Room No. 108, Nirman Building,
New Kandla, Kutch
Pincode 370210.

Place: Gandhidham

Date: ___/___/2024

(Office Seal)

Signature of Witness:

(Name & Address)

_____
_____
_____
_____

"**Note:** The bidder has to execute Integrity Pact agreement with Deendayal Part Authority (as per Bid Response Sheet No. 10 and Dr. S.K. Sarkar, IAS (Retd.) and Shri Saurabh Chandra, IAS (Retd.) have been appointed by DPA as independent External Monitors and whose address are as under:-

Dr. S K Sarkar, IAS (Retd.),
B-104, Nayantara Aptt.,
Plot 8 B, Sec 07, Dwarka,
New Delhi - 110 075.
Mobile No. 98111 49324
email: sksarkar1979@gmail.com

Shri Saurabh Chandra, IAS (Retd.)
A-9, Sector -30,
Noida (UP) 201301.
Mobile No. 9871322133
email: saurabh7678@yahoo.co.in"



Page **130** of **141**

# GUIDELINES ON BANNING OF BUSINESS DEALINGS
# (Effective from 01/01/2023)

-- DEENDAYAL PORT AUTHORITY --
दीनदयाल पत्तन प्राधिकरण

**DEENDAYL PORT AUTHORITY**

**(Formerly known as Kandla Port Trust)**
**GANDHIDHAM - KUTCH - GUJARAT - 370 201.**

## 1. Introduction

1.1 "Board" of Deendayal Port Authority (DPA) constituted by the Central Government in accordance with sub-section (1) of section 3 of the Major Port Authorities Act, 2021, has to ensure preservation of rights enshrined under the above Act. DPA has also to safeguard its commercial interests. DPA is committed to deal with Agencies, who have a very high degree of integrity, commitment and sincerity towards the work undertaken. It is not in the interest of DPA to deal with Agencies who commit deception, fraud or other misconduct while participating in tenders/in the execution of contracts awarded/orders issued to them. In order to ensure compliance with the constitutional mandate, it is incumbent on DPA to observe principles of natural justice before banning the business dealings with any Agency.

1.2 Since banning of business dealings involves civil consequences for an Agency concerned, it is incumbent that adequate opportunity for hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case.

1.3 The objective of these guidelines is to have a common procedure for Banning of Business Dealings with Agencies across the Company.

## 2. Scope

2.1 These guidelines are applicable to the sale and procurement of goods & services including contracts / projects across all the Departments and Divisions of DPA.

2.2 The General Conditions of Contract (GCC) of DPA provide that DPA reserves the rights to keep on hold participation in tenders or to ban business dealings if any Agency has been found to have committed misconduct and also to suspend business dealings pending investigation. If such provision does not exist in any GCC, the same may be incorporated.

2.3 Similarly, in the case of sale of material, there is a clause in Sale Order to deal with the Agencies / customers / buyers, who indulge in lifting of material in unauthorized manner. This should also include all activities including unauthorized selling of the material. If such a stipulation does not exist in any Sale Order, the same may be incorporated.

2.4 However, absence of such a clause as mentioned at para 2.2 & 2.3 above does not in any way restrict the right of the Board (DPA) to take action / decision under these guidelines in appropriate cases.

2.5 The procedure for (i) Board wide Hold on participation of the Agency in Tenders (ii) Suspension and (iii) Banning of Business Dealings with Agencies, has been laid down in these guidelines.

2.6 It is clarified that these guidelines do not deal with the decision of the Management not to entertain any particular Agency due to its poor / inadequate performance or for any other reason.

2.7 The banning shall be with prospective effect, i.e., future business dealings.

## 3. Definitions

In these Guidelines, unless the context otherwise requires:

i) 'Party / Contractor / Supplier / Purchaser / Customer / Bidder / Tenderer' shall mean and include a public limited company or a private limited company, a firm whether registered or not, an individual, partnership firm, Limited Liability Partnership, a

cooperative society or an association or a group of persons engaged in any commerce, trade, industry, etc. Party / Contractor / Supplier / Purchaser / Customer / Bidder / Tenderer' in the context of these guidelines is termed as 'Agency.'

ii) 'Inter-connected Agency' shall mean two or more companies having any of the following features:

a) If one is a subsidiary of the other;

b) If the Functional Director(s), Partner(s), Manager(s) or Representative(s) are common;

c) If management is common;

d) If one owns or controls the other in any manner;

e) If the agencies have same authorized signatory (ies)

f) If they have the same address/same Permanent Account Number / same Bank Account Number / common email ID.

*Note: This list is only illustrative in nature.*

iii) 'Competent Authority' and 'Appellate Authority' shall mean the following:

| **Area of Banning/ Suspension** | **Competent Authority** | **1st Appellate Authority** | **2nd Appellate Authority** |
|---|---|---|---|
| Board-wide banning | HoD of the Board | Chairman, DPA | -- |
| Banning / Suspension of business dealings with Foreign supplier of imported coal & coke | HoD's Committee | Chairman, DPA | DPA Board** |
| Board wide Suspension of business dealings with Agency | Officer nominated by Chairman of Board.<br>For Department headed by HoDs, the respective HoDs will nominate the officer for this purpose.* | Chairman of the Board.<br>For Departments headed by HoDs, the respective HoDs will be the Appellate Authority. | -- |
| Board wide Hold on participation of the Agency in Tenders # | Officer nominated by Chairman of Board.<br>For Departments headed by HoDs, the respective HoDs will nominate the officer for this purpose.* | Chairman of the Board.<br>For Departments headed by HoDs, the respective HoDs will be the Appellate Authority. | -- |

* *For Board – The nominated officer shall be a Direct Reporting Officer (DRO) not below the rank of Head of the Department for "Competent Authority" for the purpose of suspension of business dealings with the Agency as well as for Board wide Hold on participation of the Agency in tenders under these guidelines. For Corporate Office, in case of procurement of items / award of contracts to meet the requirement of Corporate Office only, Head of Department shall be the Competent Authority and HoD concerned shall be the Appellate Authority. The Management of Subsidiary shall define / appoint the "Competent Authority", Appellate Authority & Standing Banning Committee in their respective cases.*

\# *This provision for Hold on participation of the Agency in tenders shall be applicable only in such case where Standing Banning Committee recommends for keeping on Hold the participation in tenders and which shall be limited to particular Department / Division.*

** *This would be applicable only in cases of banning of business dealings with Foreign Suppliers of imported coal and coke.*

iv) 'Investigating Department' shall mean any Department or Division investigating into the conduct of the Agency and shall include the Vigilance Department, Central Bureau of Investigation, the State Police or any other department set up by the Central or State Government having powers to investigate.

**4. Initiation of Banning/Suspension**

Action for banning/suspension of business dealings with any Agency should be initiated by the Concerned Department such as Indenting / Contracting / Executing Departments, etc. having business dealings with Agency or by the department which floated the tender (in case where the tenderer has committed deception, fraud or other misconduct) subsequent to noticing the irregularities or misconduct on their part.

**5. Suspension of Business Dealings**

5.1 If the conduct of any Agency (except Foreign Suppliers of imported coal and coke) dealing with DPA is under investigation by any department of any Department, the Concerned Department may consider whether the allegations under investigations are of serious nature and whether pending investigations, it would be advisable to suspend (temporarily discontinue) business dealings with the Agency. Recommendation in the matter shall be submitted to the Competent Authority for this purpose.

5.2 If the Competent Authority, after consideration of the matter including the recommendation of the Investigating Department, decides that it would not be in the interest of Department of DPA to continue business dealings pending investigation, it may suspend business dealings with the Agency. The Suspension Order to this effect shall be issued by the Head of Concerned Department or by his representative / concerned executive with the approval of the Head of the Concerned Department, indicating a brief of the charges under investigation and the period of suspension. If it is decided that inter-connected Agencies would also come within the ambit of the order of suspension, the same should be specifically stated in the order. Ordinarily, the order of suspension would operate for a period not more than six months and may be communicated to the Agency and also to the Investigating Department.

Further to the suspension, the investigation, recommendation by the Standing Banning Committee (SBC) and final decision by the Competent Authority to be completed within six months from order of suspension.

5.3 The order of suspension of business dealings with the Agency under investigation shall be communicated to all Departmental Heads within the Board. During the period of suspension, no fresh contract will be entered into with the Agency. Suspension would be valid only for the concerned Board.

5.4 As far as possible, the Agency under suspension should be allowed to complete the job of existing contracts, unless the Competent Authority, having regard to the circumstances of the case, decides otherwise. Once the order for suspension is issued, existing offers against ongoing tenders (prior to issuance of contract)/ new offers of the Agency shall not be entertained during the period of suspension.

5.5 For suspension of business dealings with Foreign Suppliers of imported coal & coke, following shall be the procedure:-

i) Suspension of the foreign suppliers shall apply throughout the Board including Subsidiaries.

ii) The complaint against any foreign supplier shall be investigated by Board or by any other Investigating Department. If the gravity of the misconduct under investigation is found serious and it is felt that it would not be in the interest of DPA to continue to deal with such Foreign Supplier, pending investigation, the recommendation on such matter by Investigating Department (including Board) may be sent to Chairman, DPA to place it before a Committee consisting of the following:

1. Head of Finance Department,

2. Head of Department

3. Head of Law / Legal Division

The committee shall expeditiously examine the report; give its comments / recommendations within twenty one days of receipt of the reference by DPA.

iii) The comments / recommendations of the Committee shall then be placed before DPA Board's Committee. If DPA Board's Committee decides that it is a fit case for suspension, Board's Committee shall pass necessary orders which shall be communicated to the foreign supplier by Head of Department.

5.6 If the Agency concerned asks for detailed reasons of suspension, the Agency may be informed that its conduct is under investigation. It is not necessary to enter into correspondence or argument with the Agency at this stage.

5.7 It is not necessary to give any show-cause notice or personal hearing to the Agency before issuing the order of suspension. However, if investigations are not complete in six months' time, the Competent Authority with approval of Head of the Department may extend the period of suspension by another three months, during which period the investigation must be completed.

## 6. Grounds on which Banning of Business Dealings can be initiated

6.1 If the security consideration, including questions of loyalty of the Agency to the State, so warrants;

6.2 If the Director / Owner of the Agency, proprietor or partner of the firm, is convicted by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or DPA, during the last five years preceding date of tender opening or during execution of contract, provided such information is known to DPA;

6.3 If there is strong justification for believing that the Directors, Proprietors, Partners, owner of the Agency have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolations, etc. during the last five years preceding date of tender opening or during execution of contract, provided such information is known to DPA;

6.4 If the Agency continuously refuses to return / refund the dues of DPA without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in Arbitration or Court of Law;

6.5 If the Agency employs a public servant dismissed / removed or employs a person convicted for an offence involving corruption or abetment of such offence, provided such information is known to DPA;

6.6 If business dealings with the Agency have been banned by the Central or State Govt. or any other public sector enterprise at the time of submitting his bid or on the date of tender opening or at the time of placement of order, provided such information is known to DPA;

6.7 If the Agency has resorted to Corrupt, fraudulent practices including misrepresentation of facts and / or fudging / forging / tampering of documents; **Ω**

6.8 If the Agency uses intimidation / threatening / misbehaves with DPA Official or brings undue outside pressure or influence on the Board (DPA) or its official in acceptance / performances of the job under the contract;

6.9 If the Agency indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations / delayed the tendering process;

6.10 Willful indulgence by the Agency in supplying sub-standard material irrespective of whether pre-dispatch inspection was carried out by Board (DPA) or not;

6.11 Based on the findings of the investigation report of Investigating Department against the Agency for mala-fide / unlawful acts or improper conduct on its part in matters relating to the Board (DPA) or even otherwise;

6.12 Established litigant nature of the Agency to derive undue benefit;

6.13 Continued poor performance of the Agency in several contracts;

6.14 If the Agency misuses the premises or facilities of the Board (DPA), forcefully occupies tampers or damages the Board's properties including land, water resources, forests / trees, etc.

6.15 If the Agency resorts to unauthorized sale of materials purchased from the Board.

6.16 If the Agency has committed a transgression through violation of any of its commitments under the Integrity Pact entered with DPA.

*(**Note**: The examples given above are only illustrative and not exhaustive. The Competent Authority may decide to ban business dealings for any good and sufficient reason).*

- **Ω** *No experience certificate shall be issued by Engineer in Charge / Executing Authority against the contract to the Agency found to have submitted forged / fabricated documents / indulged in corrupt / fraudulent practices.*

## 7. Banning of Business Dealings.

7.1 A decision to ban business dealings with any Agency by any one of the Departments of DPA will apply throughout the Board including Divisions, i.e., Board-wide banning.

7.2 There will be a Standing Banning Committee (SBC) in each Department to be appointed by Competent Authority for processing the cases of "Banning of Business Dealings". However, for procurement of items / award of contracts, to meet the requirement of Board only, the Committee shall be HoD each from Operations, Finance & Law Departments. The proposal of the Concerned Department for initiating action under the Guidelines for Banning of Business Dealings based on their own findings and / or upon receipt of advice of the Investigating Department shall be forwarded through respective Head of Department to the Standing Banning Committee for consideration.

7.3 The functions of the Standing Banning Committee shall, inter-alia include:

i) To examine in detail the allegations / irregularities / misconduct mentioned in the proposal for banning forwarded by the Department, hold preliminary meeting and decide if a prima-facie case for banning under the guidelines exists. If during preliminary meeting, SBC is of opinion that prima facie no case is made out, it shall return the case to the Concerned Department.

ii) If it is decided to proceed for banning action, to recommend for issue of show-cause notice (as per para 9) to the Agency by the Concerned Department, as to why action should not be taken against the Agency, including its interconnected agencies, under the Guidelines for Banning of Business Dealings with them. Agency should be asked to submit its reply within 15 days of the show-cause notice.

iii) To examine the reply given by the Agency to show-cause notice and call the Agency for personal hearing, if required.

iv) To submit final recommendation to the Concerned Department for banning of business dealings with the Agency or Board wide Hold on participation of the Agency in tenders or exoneration.

7.4 If banning is recommended by the Standing Banning Committee of any Department / Division, the proposal containing the facts of the case, proper justification of the action proposed, relevant supporting documents along with the recommendation of the SBC and proposed banning period should be sent by the Concerned Department and duly forwarded by the Head of the Department / Division, to the Competent Authority. Based on this proposal, a decision for banning or otherwise shall be taken by the Competent Authority. At this stage if it is felt by the Competent Authority that there is no sufficient ground for banning, then the case with detailed reasons shall be sent back to the respective Department / Division for necessary action at their end. The Competent Authority may consider and pass an appropriate Speaking Order:

a) For exonerating the Agency if the charges / allegations are not established;

b) For banning the business dealings with the Agency or

c) For putting on Hold the participation of the Agency in tenders in the concerned Department / Division.

7.5 If the Competent Authority decides that it is a fit case for banning of business dealings with the Agency, the Competent Authority shall pass necessary orders which shall be routed back to the Department concerned for issuance of banning orders to the Agency. However, in cases where there is a shortage of suppliers and banning may hurt the overall interest of DPA, endeavour should be to pragmatically analyze the circumstances, try to reform the Supplier and to get a written commitment from them that their performance will improve.

7.6 If the Competent Authority decides to ban business dealings, the period for which the ban would be operative shall be mentioned. If applicable, the order may also mention that the ban would extend to the interconnected agencies of the Agency. The Speaking Order for banning would be conveyed by the Concerned Department to the Agency concerned and copy circulated to all Departments of DPA.

7.7 The Banning period may range from 1 year to 3 years depending on the gravity of the case as decided by the Competent Authority. Ordinarily, the period of banning shall be in the range of 1-2 years from the date of issuance of order depending on the severity of the irregularities / lapses committed / termination of contract due to poor performance, etc. However, in case of fraud / forgery / corrupt / fraudulent practice or tampering of documents by the Agency as given in para 6.7 above, the period of banning to be imposed on the Agency would be three years. The period of suspension, if any, shall be accounted for up to a maximum of 6 months in the period of banning provided the banning order is issued within the period of suspension.

7.8 As far as possible, the Agency under banning should be allowed to complete the job of existing contracts, unless the Competent Authority, having regard to the circumstances of the case, decides otherwise. Once the order for banning is issued, existing offers against ongoing tenders (prior to issuance of contract) / new offers of the Agency shall not be entertained during the period of banning. In addition, if the Agency has been banned under provisions of Para 6.7, then the particular contract in which the irregularity has been proved will be terminated with immediate effect. In exceptional cases, where it would not be prudent to terminate the said contract with immediate effect, the contract may be allowed to continue for such minimum period during which alternate arrangement(s) can be made. The same shall however require the approval of the Chairman / HoD where the exigency to continue the contract has been clearly brought out.

7.9 In case the Competent Authority has decided to exonerate the Agency, the Concerned Department will issue the exoneration letter to the Agency concerned as well as communicate to all Departmental Heads within the Department / Division. If the Agency has been suspended in the case under consideration, in the same letter to the Agency it must be clarified that the Suspension has also been revoked.

7.10 Procedure for Banning of Business Dealings with Foreign Suppliers.

i) Banning of the Agencies shall apply throughout the Company including Subsidiaries.

ii) The complaint against any Foreign Supplier shall be investigated by Head of Department of DPA or any other Investigating Department. After investigation, depending upon the gravity of the misconduct, Investigating Department may send their report to Head of Department of DPA to place it before a Committee referred at 5.5 (ii) above. The Committee shall examine

the report and give its comments / recommendations within 21 days of receipt of the reference by Head of Department, DPA.

iii) The comments / recommendations of the Committee shall be placed by Head of Department before DPA Board's Committee constituted for the above purpose. If DPA Board's Committee decides that it is a fit case for initiating banning action, it will direct Chairman of DPA to issue show-cause notice to the Agency for replying within a period of 15 days of receipt of the show-cause notice or reasonable time.

iv) On receipt of the reply or on expiry of the stipulated period, the case shall be submitted by DPA Board's Committee to Chairman of DPA for consideration & decision.

v) The decision of the Chairman of DPA shall be communicated to the Agency by DPA.

**8. Department / Division wide Hold on participation of the Agency in Tenders**

8.1 If the SBC recommends for Board wide Hold on participation of the Agency in Tenders on coming to a conclusion that the charge against the Agency is minor in nature, the Concerned Department shall put up a proposal to the Competent Authority containing facts of the case, proper justification of action proposed, relevant documents alongwith the recommendations of the Committee and proposed period for Hold from participation in tenders. If the Competent Authority decides that it is a fit case for Board wide Hold on participation of the Agency in tenders, the Competent Authority may pass necessary orders which shall be communicated to the Agency by the Concerned Department. The period of Hold may range from 6 months to 1 year.

8.2 The effect of Board wide Hold on participation of the Agency in tenders would be that the Agency would not be considered for any type of Tenders for such period as mentioned in the order at any stage before issuance of contract. Other existing contracts with the Agency would continue unless otherwise decided by the Competent Authority. However, no repeat orders would be placed on the party for the period as mentioned in the order.

8.3 The modalities for effecting Hold on participation of the Agency in tenders and re-entry after completion of period of Hold shall be worked out by the concerned Department / Division as the Hold is Department / Division specific.

**9. Show-cause Notice**

9.1 In case where the Competent Authority decides that action against an Agency is called for, a show-cause notice shall be issued to the Agency by the Concerned Department. Statement containing the imputation of misconduct should be appended to the show-cause notice and the Agency should be asked to submit within 15 days a written statement in its defence. It must be clearly mentioned in the Show-Cause Notice that DPA hereby proposes to initiate action against the Agency in terms of the Guidelines on Banning of Business Dealings. Generally, all communication with the Agency shall be through email mentioned by Agency in contract or last known email and postal address.

9.2 If the Agency requests for inspection of any relevant document in possession of DPA, necessary facility only for inspection of documents may be provided.

**10. Appeal against the Decision of the Competent Authority**

10.1 The Agency may file an appeal against the order of Board-wide banning of business dealings / suspension / Board wide Hold on participation of the Agency in tenders. The appeal shall lie to the respective Appellate Authority only. Such an appeal shall be preferred within 30 days of receipt of the order.

10.2 Appellate Authority would consider the appeal and pass appropriate Speaking Order which shall be communicated by the Concerned Department to the Agency as well as the Competent Authority whose Order has been appealed.

**11. Circulation of the names of Agencies with whom Business Dealings have been banned**

11.1 The Board shall upload/update the list of banned agencies alongwith the period of banning immediately on issue of the banning order on the Board's website as well as DPA Tenders website for wider circulation. Other Boards would check the list of banned Agencies before proceeding on tenders at their respective Boards. Boards having SAP/SRM system shall disable the banned vendors in SAP/SRM from issuance of further Enquiry/Purchase Order till the expiry of the banning period.

11.2 Depending upon the gravity of misconduct established, the Competent Authority may advise Head of Vigilance Department / HoD for circulating the names of Agency with whom business dealings have been banned, to the Government Departments, other Boards, Public Sector Enterprises, etc., for such action as they deem appropriate. The updated list of banned Agencies must be uploaded by Board on DPA Tenders website for wider circulation.

11.3 If Government Departments or a Public Sector Enterprise request for more information about the Agency with whom business dealings have been banned, a copy of the report of Investigating Department / Standing Banning Committee / DPA Board's Committee together with a copy of the order of the Competent Authority / Appellate Authority may be provided.

11.4 If business dealings with any Agency have been banned by the Central or State Government or any other Public Sector Enterprise, DPA may, on receipt of such information, without any further enquiry or investigation, issue an order banning business dealings with the Agency and its interconnected Agencies. In event of receipt of information, the procedure for banning in DPA will still have to be followed though no investigation will be called for, and the banning period proposed should be co-terminus with the period of banning in the organization which has issued the banning order but limited to the maximum period of banning as per the extant banning guidelines of DPA. On completion of the banning period as per DPA banning order, the Agency will be eligible for participating in any tenders in DPA irrespective of banning status in the other organization.

11.5 Based on the above, Departments / Divisions may take necessary action for implementation of the Guidelines for Banning of Business Dealings and same be made a part of the tender documents.

**12. Saving**

Any amendment to the guidelines shall require the approval of Chairman, DPA.

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