

FORMAT B.1**Format for Technical Pre-Bid Queries****Tender No** TPSODL/OT/2022-23/68**Package Name** Rate Contract for Supply of Isolators and accessories**Bidder :** Consolidated**Note :** The said format to be used only for Technical Pre-Bid Query. Any Commercial Query has to be strictly in Format B2 Format for Commercial Pre-Bid Query and sent separately

Format to be used for query regarding Technical Pre-Qualification Requirement, Safety Pre-Qualification Requirement, Technical Set of Document

Pre-Bid Query has to be sent in editable Excel file format only**Pre-Bid Query has to be sent through e-mail in TPSODL E-Tender System**

| Sr. No. | Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No | Description as per Bid Document | Remarks - Query / Clarification | TPSODL Response |
|---------|--|--|--|--|
| 1 | 2 | 3 | 4 | 5 |
| 1 | Clause 5.1 & 5.5 of Technical Specification | Material of Insulator: Porcelain | Material of Insulator should be Porcelain as per Technical Specification but as per item description of Annexure-I (Schedule of Items) it is specified as Polymer. Please confirm. | Porcelain Insulator to be used inline with technical specification. |
| 2 | Clause 5.5 of Technical Specification | Type of Insulator | Type of Insulator specified as Solid Core. But solid core porcelain insulator for 11kV is not available. Should we consider the same as Post Insulator (for 11kV). | Solid Core Porcelain Post Insulator to be used as per Guaranteed Technical Requirements. |
| 3 | Sl. No. 12 of Guaranteed Technical Requirement | Rated Short Time Current | STC specified 25kA for 33kV Whereas 26.3 kA for 11kV. Normally fault level of 33kV system is higher than 11kV system. Please confirm. | 11KV 25kA for 3sec 33KV 26.3kA for 3sec |
| 4 | Sl. No. 4 of Annexure-I (Schedule for Items) | Junction Box for 33kV & 11kV Isolator | Is Junction Box means Operating Box for Isolator and Earth Switch? If so, please confirm whether the boxes will be motorised or manual operated type. | Operating Box/Control Cabinet are required for Isolator & Earthswitch Please refer revised BoQ |
| 5 | <u>INSULATORS</u> : for 33kv & 11kv Isolator Doc No. ENG-ELC-013, i. Cl. No.- 5.5, Page No. 8 of 24, ii. Sl. No. 16 of G.T.P (Cl. No.- 4) of Page No. 4 of 24, iii.Sl. No. 29 of G.T.P (Cl. No.-4) of Page No. 5 of 24 | Material : PORCELAIN, Type: SOLIDCORE type, C.D-25 mm/KV for both Insulator (T.S/GTP). POLYMER mentioned for Sl. No. 3 (11kv Isolator) in the ANNEXURE I (Schedule of Items). | For 33kv ISOLATOR, either 1 X 36 kv Solidcore type Porcelain Insulator/stack OR, 2 X 24 kv Porcelain Insulator/stack OR, 1X36 kv Polymer Insulator/stack may be used. Please mention your requirement clearly about requirement of Insulator for 33 kv Isolator. For 11kv Isolator, it is not mentioned which Class of Insulator shall be used. 12 kv or 24 kv Class ? Creepage Distance of Insulator mentioned in GTP, 25 mm/KV. Then for 12 kv Insulator C.D will be 25x12= 300 mm (min.) Please mention your requirement clearly about requirement of 11 kv Isolators either 12 kv Porcelain Insulator OR, 24 kv Porcelain Insulator(Base Channel mentioned 100x50 mm) OR, 12 kv Polymer Insulator. | Solid core type porcelain insulator is required in line with our technical specification. |
| 6 | <u>BASE FRAME</u> : Doc No. ENG-ELC-013, Cl. No.- 5.1, Page No. 6 of 24 | 100X50 mm for 33kv Isolator & 11 kv Isolator | Generally 75x40 mm Channel has been used for 11 kv Isolator & 100x50 mm for 33 kv Isolator in common practise averagely. Confirm us your final requirement. | Specification to be complied |
| 7 | <u>OPERATING MECHANISM</u> : Doc No. ENG-ELC-013, Sl. No. 13 of GTP (Cl. No. 4), Page No. 4 of 24 (T.S) | As per G.T.P, Optg. Mechanism box.- Motorised & Manual For both 33 kv & 11 kv Isolators. | Confirm us clearly about your requirements for Operating Mechanism Boxes Specially for 11 kv Isolators (Motorized / Non-Motorized) ? For NON-MOTORIZED Boxes, we shall supply Box with 6NO/6 NC Aux. switch with Mech. & Electrical Interlock but w/o Gear & w/o Motor provision. | Operating Box/Control cabinet for Isolator and Earth Switch are required & Refer the revised BoQ for clarifications of manual & motorised |
| 8 | <u>CONTROL CABINET</u> : Doc No. ENG-ELC-013, Sl. No.- 23 of G.T.P(Cl. No.4), Page No. 5 of 24 and Cl. No.- 5.7 of Page No. 9 of 24. | Thickness of Sheet metal - 3 mm & Material of the Box - Stainless Steel. | 3 mm thick S.S Sheet is NOT POSSIBLE to use for bending work of door, etc. MAX UPTO 1.5 mm thick is possible for fabrication work. 3 mm Sheet is possible for M.S /AL. Sheet boxes. Secondly, Painting of Powder coating is NOT POSSIBLE for S.S Box. Painting is Possible for M.S/S.S Box. Confirm us clearly about all mentioned matters (About material, thickness of Sheet.) for Operating Mechanism Boxes for main isolator & Earth Switches. | Material of Control cabinet/Operating Box -MS Hot Dip Galvanised (Min 100 Micron thickness) with Paint finished in line with technical specification |

| Sr. No. | Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No | Description as per Bid Document | Remarks - Query / Clarification | TPSODL Response |
|---------|--|---|--|--|
| 9 | <u>INTERLOCK</u> : Doc No. ENG-ELC-013, Sl. No.- 27 of G.T.P(Cl. No. 4), Page No. 5 of 24 and Cl. No.- 5.9 of Page No. 12 of 24. | Mechanical Interlock - Castle Key & Electrical Interlock- Solenoid | Confirm us Clearly about the Requirement of Electrical Interlock Solenoid Coil for EARTH SWITCH Boxes.(11kv & 33kv Isolator). It is required or NOT REQUIRED for Earth boxes. | Electrical interlock not required for earth switch |
| 10 | <u>TERMINAL CONNECTORS</u> : Doc No. ENG-ELC-013, Cl. No.- 5.4 of Page No. 8 of 24. | Material : High conductivity electrolytic grade copper | Its NOT POSSIBLE in design, because conductor material is Al., so Terminal Connector should be Aluminium Alloy and with Bi-metallic sheet at the point of fixing with Copper Terminal Pad. Please Look into the Technical Point. | Bimetallic connector shall be acceptable inline with technical specification |
| 11 | As per Annexure I (Schedule for Items) Sl. No. 4 | Only Junction Box for 33kV Isolator & ES (including Cabling) for Existing Isolator: | : Please acknowledge us about the Bill of Materials should be used / supply. | Separate Junction Box/Control cabinet to be supplied inline with BoQ & Technical specification |
| 12 | As per Annexure I (Schedule for Items) Sl. No. 1,2,3: | Required Post insulator are Polymer but in TS there mentioned Porcelain instead of Polymer | Please confirm | Porcelain Insulator to be used inline with technical specification. |
| 13 | Document No. ENG-ELC-013 S. No. 13 of Clause No. 4.0 (General Technical Requirements) | Operating Mechanism: For Isolator : Motorised & Manual For Earth Switch : Manual | Please clarify that Operating Mechanism Box for Isolator shall be Motorised Operated or Manual Operated. | Operating Box/Control cabinet for Isolator and Earth Switch are required & Refer the revised BoQ for clarifications of manual & motorised |
| 14 | Document No. ENG-ELC-013 S. No. 29 of Clause No. 4.0 (General Technical Requirements) - and S. No. 1 of Schedule for Items (Annexure I) | Document No. ENG-ELC-013 S. No. 29 of Clause No. 4.0 (General Technical Requirements) - Mention Solid Core Porecelain Post Insulator but metioned in S. No. 1 of Schedule for Items (Annexure I) : (Polymer Insulator) | Please clarify that required Insulators shall be Polymeric or Porecelain as per below : For 33kV Isolator : Polymer / Porecelain Solid Core Insulator For 11kV Isolator : Polymer / Porecelain Post Insulator | Porcelain Insulator to be used inline with technical specification. |
| 15 | Document No. ENG-ELC-013 Clause No. 5.7 (Manual Operating Mechanism: Control Cabinet of Isolator or Earth Switch) | Mentioned that Operating Boxes shall be Manual Operating Mechanism: Control Cabinet of Isolator or Earth Switch | Please clarify that Operating Mechanism Box shall be Motorised Operated or Manual Operated | Operating Box/Control cabinet for Isolator and Earth Switch are required & Refer the revised BoQ for clarifications of manual & motorised |
| 16 | Document No. TPSODL/OT/2022-23/068 S. No. 1 to 3 of Schedule for Items (Annexure I) | Metioned in BOQ : Isolator with Structure & foundation Bolt | Please clarify that Mounting Structure and Foundation Bolts shall be in the scope of supply or not. | Mounting structure and Foundation Bolts are not in scope of supply |
| 17 | Document No. TPSODL/OT/2022-23/068 S. No. 4 of Schedule for Items (Annexure I) | Metioned in BOQ : Only Junction Box for 33 KV Isolator & ES (Including Cabling) for Existing isolators | Please clarify that what do you mean by Junction Box for 33kV Isolator & ES. Is its meaning is Operating Mechanism Box. or it is any other Junction Box required in the scope of supply. Also please clear that specification is asking for which cabling. is its internal wiring or from MOM box to control room field cabling. | Refer the Technical Specification of Control Cabinet for 33KV DBCR type isolator. |
| 18 | Document No. ENG-EHV- Control cabinet for 33KV DBCR type Isolator Clause No. 4.0 of General Technical Requirements and General Constructions | metioned "removable gland plate with double compression type brass cable glands shall be provided with each operating mechanism for terminating all cables: | Please clarify the size and quantity of Brass Cable Gland for the both type of operating mechanism box. | Double compression type brass cable glands to accommodate 10Cx2.5 Sqmm Control cable and Quantity will be finalised during detailed Engineering |
| 19 | | Mentioned "temperature rise under different operating conditions shall not exceed the value specified in IS: 99241. | Please clarify the IS: It is to be IS:99241 or IS:9921/IEC-62271-102 for the temerature rise limit. | IS:9921/IEC-62271-102 for temperature rise to be considered |

| Sr. No. | Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No | Description as per Bid Document | Remarks - Query / Clarification | TPSODL Response |
|---------|---|--|--|---|
| 20 | ANNEXURE I Schedule for Items, Page 17 | 33 KV 1250 AMP Double break (Turn & twist centre rotating) isolator without earth switch with PI (Polymer) with structure, foundation bolt, Pad and clamp. | 1. Please clarify that the isolator is Turn & Twist type or normal Banging type. 2. Structure, Fondation bolt Pad and clamp is in our Scope or not. If in our scope please share the Details Drawing & GTP. 3. In the BOQ mention PI (Polymer) insulator, Kindly confirm the same is polymer or either Porceline | 1. Isolator is Turn and Twist type. 2. Mounting structure and Foundation Bolts are not in scope of Bidder. 3. Porcelain Post Insulator to be used in line with technical specification |
| 21 | ANNEXURE I Schedule for Items, Page 17 | 33 KV 1250 AMP Double break (Turn & twist center rotating) isolator with earth switch with PI (Polymer) with structure, foundation bolt, Pad and clamp | 1. Please clarify that the isolator is Turn & Twist type or normal Banging type. 2. Structure, Fondation bolt Pad and clamp is in our Scope or not. If in our scope please share the Details Drawing & GTP 3. In the BOQ mention PI (Polymer) insulator, Kindly confirm the same is polymer or either Porceline | 1. Isolator is Turn and Twist type. 2. Mounting structure and Foundation Bolts are not in scope of Bidder. 3. Porcelain Post Insulator to be used in line with technical specification |
| 22 | ANNEXURE I Schedule for Items, Page 17 | 11 KV 630 AMP isolator without earth switch with PI(Polymer) with structure, foundation bolt, Pad and clamp | 1. Structure, Fondation bolt Pad and clamp is in our Scope or not. If in our scope please share theDetails Drawing & GTP 2. In the BOQ mention PI (Polymer) insulator, Kindly confirm the same is polymer or either Porceline | 1. Isolator is Turn and Twist type. 2. Porcelain Post Insulator to be used in line with technical specification |