

**Clarification No-I dt 08.05.2026 to the Bidding Documents for 400kV GIS Extn Substation Package SS-156 for (i) Extn. of 400/230kV Tuticorin-II GIS SS associated with Augmentation of 1x500 MVA, 400/230 kV ICT (7th) at Tuticorin-II GIS Sub Station and (ii) 1 no. 230kV line bay at Tuticorin-II GIS for providing Connectivity to M/s Indianoil NTPC Green Energy Pvt. Ltd. Spec No.: CC/NT/W-GIS/DOM/A01/26/04616**

S.No	Reference Document	Reference Clause/DocNo.	Technical Issue	Clause Description	Bidder Query	POWERGRID Reply
1	Layout	C/ENGG/SR/TUTICORIN-II/GIS/GA/EXTN./001	220kV SF6 bushing	220kV SF6 bushing indicated in the layout for busbar extension.	As per the layout, 12 numbers of 220kV SF6 bushings are shown for AIS bus extension work; however, there is no corresponding line item provided for SF6 bushings in the BPS.	<b>Refer Amendment No- I for inclusion of "245KV, 3000A, 50KA SINGLE PHASE SF6 TO AIR BUSHING": 12 nos + 1 no (Spare)</b>
2	Section Project_SS156	Cl.no:2.2.2.D,I (Pg.No:13 of 22) & Cl.no: 2.2,D,X (Pg.No:9 of 22)	Erection hardware for 33kV tertiary	Structure and foundation for tertiary delta formation for Transformers along with associated spare unit connection arrangement.  Erection hardware of a bay shall include Insulator strings and hardware, Disc Insulators/Long Rod Insulators (as applicable), Conductor(s), Al tube, Cable Trays & covers, spacers, clamps & connectors (including terminal connectors for 400/230/33kV transformer bushings), Junction box, earthwire, earthing material risers, auxiliary earthmat (excluding main earth mat), buried cable trenches/pipes for equipment & lighting, cable supporting angles/channels Cable pull pit, cable trays & covers, Insulating mats, cable sealing arrangement, , all accessories etc. as required.	As per the SLD, there is no 33kV tertiary arrangement for ICT-7. Layout and BPS also don't have provisions for it. However, the section project clause refers the tertiary winding configuration in the 3-phase ICT transformer. We consider this is not applicable. Kindly confirm.	<b>Confirmed</b> <b>Tertiary delta formation for ICT-7 is not applicable under present scope.</b>
3	Layout	C/ENGG/SR/TUTICORIN-II/GIS/GA/EXTN./001	SPR Room for 220kV HGIS bay	SPR room not indicated in layout.	Kindly Confirm the location of switchyard panel room.	<b>Location of SPR shall be finalised during detailed Engineering</b>
4	Section Project_SS156	Clause no. 2.2.1 D. xiii (Pg.No:10 of 22)	LT Switchgear	Existing ACDB-I & II shall be augmented under present scope by providing 8 sets of 63A, 4P MCCB, 4 set of 32A, 4P MCCB, 2 set of 100A, 4P MCCB and 1 set of incomer MCCB, 4P 300A along with required TB's and wiring on each ACDB. The MCCBs under present scope shall be provided in separate extension board (1 each for ACDB I & II). Further, 1 no. outgoing 300A 4P, MCCB on each existing ACDB, shall be provided. The separate extension board shall be integrated with existing ACDB and shall be kept adjacent to existing ACDB. All materials including cables required for extension of ACDB are deemed to be covered under ACDB Extn item of BPS.	Kindly confirm whether space is available in the LT panel room for accommodating the ACDB as per the present scope. Also, please clarify whether a vacant/spare feeder is available in the existing ACDB to be utilized as the incomer for the proposed ACDB.	<b>Confirmed</b>
5	Section Project_SS156	-	Incoming for emergency ACP-2 (Outdoor lighting panel) & emergency ACP-1 (Indoor lighting panel)		Kindly confirm the incoming supply for Emergency ACP2 & Emergency Indoor lighting panel. As per our previous experience, feeder is not available in ELDB.	<b>Incoming supply for Emergency ACP2 &amp; Emergency Indoor lighting panel shall be finalised during detailed Engineering.</b>
6	Price_Schedule	-	LV Cable		<b>I) Extn of Tuticorin-II GIS for ICT7 &amp; line, BPS for LV power &amp; control cable is repeated in sr.no 44-46 &amp; 108-110 .Kindly clarify</b> <b>II) 1no. 230kV Line bay @Tuticorin2-NTPC GR line, BPS there is no line item for power and control cable. Kindly clarify.</b>	<b>Refer Amendment No- I . Further it is clarified that the cable for complete scope under this Package shall be quoted under the BPS item S.No-44-46 (SCH-I&amp;II) and S.No-31 to 33 (SCH-III) .</b>

7	Price_Schedule & Layout	-	220kV BPI for Indianoil NTPC green energy line		As per the layout, 13 numbers of 220kV BPI are shown for 220kV Indianoil NTPC green energy line however, in BPS 12 numbers of BPI shown. Kindly clarify.	<b>Actual Quantity of BPIs shall be finalised during detailed Engineering based on layout requirements. Bidder to quote as per provisions of bidding documents.</b>
8	General	-	Tension Insulator for 220kV Indianoil NTPC green energy line & 220kV NLC Industries line		220kv tension insulator on 220kV Indianoil NTPC green energy line & 220kV NLC Industries line is not in bidder scope. Kindly confirm.	<b>Please refer to Technical specification - Section Projects CI no. 2.2.1-D-x wherein it is specified that, Erection hardware of a bay shall include Insulator strings and hardware fittings for the respective bay. Further, Clause-J(1) of Specific Requirement Rev-10 may also be referred.</b>
9	Layout	C/ENGG/SR/TUTICORIN-II/GIS/GA/EXTN./001	CRP panel location for 220kV ICT-7 & 220kV Indianoil NTPC green energy line & 220kV NLC Industries line		We understand that the 220kv ICT 7 CRP panel will be placed in the existing SPR room near the 220kv buscoupler, while the 220kV line CRP panels are placed in the new SPR room. Kindly clarify if our understanding is correct.	<b>To be finalised during detailed Engineering based on layout requirements. Bidder to quote as per provisions of bidding documents..</b>
10	Section Project_SS156	Clause no. 2.2.1 D. iii, Page no.- 7 of 22	400kV BB	In case any minor item is required for the augmentation of 400kV bus bar protection, same shall be deemed to be included in service item of same.	With ref. to existing system & supplied SAS system for SS132, we assume that ports are available for configuration the present scope 400kV bays hence there is no any additional supply required of CU units.	<b>Bidder to quote as per provisions of bidding documents.</b>

11	Section Project_SS156	Clause no. 2.2.1 D. xv, Page no.- 11 of 22	PMU	<p>The broad Scope of the procurement of PMU shall include planning, designing, engineering, supply, transportation, insurance, delivery at site, unloading handling, storage, installation, termination, testing and demonstration for acceptance, commissioning, and documentation for PMU as per BPS.</p> <p>1. The PMU shall comply with latest version of IEC/IS 60255-118-1-2018 and IEEE C 37.118.2 protocols standards.</p> <p>2. The PMU shall be integrated with Phasor data Concentrator (PDC) at respective Regional Load Despatch Centre (RLDC)/ State Load Despatch Centre (SLDC).</p> <p>3. The Contractor shall extend technical support at Substation end for seamless integration of PMU with PDC at respective RLDC/SLDC end. The integration work at RLDC end will not be under the scope of the Contractor. The PDC at RLDC/SLDC is of M/s GE make.</p> <p>4. The PMU supplied in this project shall support measurement of voltages and currents of at least 2 feeders/bays.</p> <p>5. All cabling and interconnections for extension of CT/CVT, Digital inputs from the Line Bays, ICTs/Reactors/STATCOM bays up to PMU panel for measurement by PMU, shall be in the scope of the Contractor. Accordingly, the associated 1.1KV Control cables as required for Non-Adjacent Inter- Control and Relay panel (CRP) CT/PT connections &amp; Digital input connections to PMU panel shall also be under the Contractor's scope. The scope of these cabling work (supply, laying &amp; termination), as applicable in subject project, shall be deemed to be included in price of PMU equipment.</p> <p>6. Validity of Type test for PMU shall be as per CEA Guidelines January 2026.</p>	<p>Kindly confirm the below points,</p> <p>1- With reference to the BPS, we assume that PMU supply is only for the 230kV side Line of "Extension of 400/230kV Tuticorin-II GIS Substation".</p> <p>2- Please note that we will do work up to the device used for transferring data (PMU/FOTE/PLCC) to RLDC/SLDC. After that it will falls under the client.</p>	<p><b>1. Confirmed</b></p> <p><b>2. Please refer to Technical specification - Section Projects Cl no. 2.2.1-D-xv</b></p>
12	Technical Specification, Section Project SS-156	D. Air insulated switchgear (AIS) and Other Main Equipment	FIRE PROTECTION SYSTEM	<p>iv. FIRE PROTECTION SYSTEM:</p> <p>a) Fire protection system including HVWS &amp; Hydrant system for 1x500MVA, 400/230/33kV, 3-ph Autotransformers is included in present scope. Hydrant Piping for fire protection system shall be extended from nearest existing Main Header in the switchyard.</p>	<p>Kindly confirm Existing fire annuciation panel at FFFPH &amp; Control Building have enough zones/window for integrating signals from present scope HVWS system.</p>	<p><b>Confirmed</b></p>
13	Technical Specification, Section Project SS-156	D. Air insulated switchgear (AIS) and Other Main Equipment	FIRE PROTECTION SYSTEM	<p>iv. FIRE PROTECTION SYSTEM:</p> <p>b) The hydrant system for 400kV GIS hall extension area is also included under present scope. This will include dismantling and shifting of existing piping required for extension of GIS hall. The cost of the new piping and dismantling of old piping as per requirement shall deemed to be included in overall cost of firefighting works under this specification.</p>	<p>Kindly provide Existing fire hydrant drawing near GIS Hall and tapping location/modification scope work as per layout. Also there is no line item for GIS Hall Fire Hydrant modification work in BPS, Kindly confirm on same</p>	<p><b>Bidders are advised to visit site as per Technical specification - Section Projects Cl no.1.6</b></p> <p><b>The cost of the new piping and dismantling of old piping as per requirement shall deemed to be included in overall cost of firefighting works under this specification. Bidder to quote as per provisions of bidding documents.</b></p>



19	Price Schedule	General			Please confirm whether the demolition and re-erection of the rolling shutter at the 400 kV GIS Hall is necessary, or if we need to supply new rolling shutter	<b>Bidder to quote as per provisions of bidding documents.</b>
20	Price Schedule	General	Partition work		Please confirm which type of barricade is needed for the partition work inside the 400kV GIS Hall.	<b>Bidder to quote as per provisions of bidding documents.</b>
21	General	General	SBC report		We request you to share the SBC report for the proposed substation location, including recommendations for the foundation.	<b>Shall be shared during detailed Engineering as per requirements.</b>
22	Price Schedule				During the site visit, it was noted that the Np-2 and Np-3 hume pipes are not included in the BOQ (Bill of Quantities) for civil work items.	<b>Bidder to quote as per provisions of bidding documents.</b>
23	Price Schedule				During the site visit, it was observed that the demolition of PCC (1:4:8) beneath the RCC road is not included in the BOQ (Civil Work) items.	<b>Dismantling of road is presently not envisaged. If required during detailed engineering, the same shall be dealt as per provisions of bidding documents.</b>
24	Price Schedule				During the site visit, it was observed that the demolition of drain is not included in the BOQ (Civil Work) items.	<b>Demolition of drain is presently not envisaged. If required during detailed engineering, the same shall be dealt as per provisions of bidding documents.</b>
25	General				Tree cutting is required within the substation premises (Near HGIS); related permission falls under PGCIL's scope. Pls confirm	<b>Confirmed</b>
26	General				Kindly confirm whether the leveled land is free from all objects (like trees, underground utilities, and any others). Will this be provided by PGCIL or is it the bidder's responsibility?	<b>Bidder to quote as per provisions of bidding documents..</b>
27	General	price schedule	PEB		Kindly confirm the colour code of the PVDF coating on PEB	<b>In case of extension of GIS building, the same shall be matched with the existing building.</b>

28	Section Project_SS156		4.0 Physical and other Parameters 4.2 Meteorological data	Seismic Zone As per IS 1893 (Part 1) Wind Zone IS 875 Part 3	Offered product is 0.5g seismic zone complaint as per IEC 62271-207. Max. wind speed capacity is 34 m/s.	Seismic zone and wind zone shall be considered as per the provisions of the bidding documents.
29	Annexure IV to section project -HGIS description		230kV Line Feeder Bay: & 230kV Transformer Bay:	Nine nos. 245kV, 1600A, 1ph. SF6 to Air Bushings for connection with two main buses(AIS) and overhead line side AIS equipment.	Please clarify what is overhead line side AIS equipment.	Please refer Tender drawing - GA & SLD wherein the line side equipment is indicated.
30	Section - GIS, Rev - 5A		20. Type Test	14. Rector Current Switching Test For Reactive Current switching capability as per Clause 6.4.1	Reactor Switching test is done as per IEC 62271-110 specified value. Testing at any other rating is not feasible and we will not be repeating the same.	Please refer Technical specifications - Section Project - Specific Requirement Rev 10, (B), (19) wherein it is specified: "Reactor current switching test for Inductive Current switching capability as per IEC 62271-110. Further, the manufacturer whose circuit breakers tested with smaller current w.r.t current limits specified for Reactor current switching test duty-2, 3 & 4 in IEC 62271-110 shall also be acceptable."
31	Section Project_SS156		2.2 Extension of 400/230kV Tuticorin-II GIS Substation:	2.2.1 - A - 400kV Gas Insulated Switchgear - Existing 400kV GIS Main Bus-I & Main Bus-II is of M/s Hyosung make shall be extended for the present scope 400kV GIS bays.	Kindly Provide the Main Bus - I & Main Bus - II Interface module (End module) details of existing Hyosung GIS. Also, Provide the Name Plate Details, Model No, Year of Manufacturing,etc.	Shall be shared to the successful bidder during detailed Engineering.
32	Section Project_SS156 & Price_Schedule		Schedule - 1 Schedule - 3	Augmentation of Substation automation System for 220kV bay as per Technical Specification Augmentation of Substation automation System for 400kV Main bay as per Technical Specification Augmentation of Substation automation System for 400kV Tie bay as per Technical Specification Augmentation of existing 400kV bus bar protection scheme.(No. of bays as per specification)-(with Automation)	The NR Electric does not exist in India. Kindly exclude the Augmentation works from Bidder Scope. Kindly confirm please.	Bidder to quote as per provisions of bidding documents.