

**Clarification-I dated 10.09.2024 to the bidding documents of 220kV GIS substation Package SS-136 associated with Augmentation of Transformation capacity at 765/400/220kV Vadodara (GIS) S/s in Gujrat by 400/220kV, 1X 500MVA ICT (3) prior to bid opening by POWERGRID; (Spec No: CC/NT/W-GIS/DOM/A06/24/11914)**

Sl. No.	Volume / Section /Clause No.	Description	Bidders Query	POWERGRID Reply
1	Price Schedule - Sch 1 Supply	Price Schedule	We have gone through the complete Schedule 1 of Supply price schedule but we have not found any bill of quantity for conductor/IPS Tubes. Kindly Confirm type of conductor and its quantities. & add Supply line item for supply of conductor in price schedule.	The requirement of bidding document is ample clear. Erection hardware items as per Specification including conductor/IPS Tubes are part of Erection Hardware BPS item. Bidder to quote accordingly.
2	Price Schedule Sch-1 Supply Sr. No. 39 to 46		We have gone through the complete BOQ mentioning hardware fitting is required for suitable conductor, however we have not found types of conductor. Kindly request you to furnish us type of conductor to be used in both 220 KV and 400 KV side of substation.	The details of Line side conductor shall be provided to successful bidder during detailed engineering stage.
3	Price Schedule Sch-1 Supply Sr. No. 39 to 46		Kindly confirm whether the Tension/Suspension String would be Single or Double Tension String?	Bidder to refer clause no. 2.3 of Section: Switchyard Erection, Rev-10 of Technical specification.
4	Clause 2.2.1.1 ( B )	Scope of works	Extension of existing 220kV GIS Main Bus-I & Main Bus-II ( <b>M/s ABB High Voltage Switchgear (Xiamen) Company Limited make</b> ) are envisaged for the present scope 220kV GIS Bays.  Kindly request you to furnish us existing drawings for check the compatibility details for other OEM (GIS Manufacturer).	Existing 220kV GIS Layout & GAS SLD had already been provided with tender documents and other available details of existing GIS shall be provided to successful bidder during detailed engineering stage. However, as per clause no 1.5 of section project, bidders are advised to visit the substation sites and acquaint themselves with the topography, infrastructure and also the design philosophy.
5	Clause 2.2.1.1 ( C ) - ix (VMS)		Augmentation of Visual Monitoring System (VMS) for area under present scope of work.  Kindly request you to furnish us existing <b>makes of VMS.</b>	Bidder to refer clause no. 2.2.1.1C (ix) of Section project.
6	Clause 2.2.1.1 ( C ) - vi - Fire Protection System		Under the present scope, contractor shall integrate the annunciation/alarm signals of 400/220kV Transformers with the existing Annunciation panels placed in the FPPH building & Control room Building and in existing SAS system. The scope shall include Capability enhancement as required & all required items including cables etc., and the cost shall be deemed to be included under BPS line item for Fire protection of Transformer.  Kindly request you to furnish us existing details of Annunciation panels placed in the FPPH building & Control room Building and in existing SAS system.	Bidder to refer 2.2.1.1C (vi) of Section project where the scope related to Fire fighting works are ample clear. Further, the available existing Fire Fighting drawings shall be provided to the successful bidder during detailed engineering stage. However, as per clause no 1.5 of section project, bidders are advised to visit the substation sites and acquaint themselves with the topography, infrastructure and also the design philosophy.
7	Volume-II_part_10	Civil Drawings	Kindly provide us 500MVA, 400/220/33kV, 3-Ph Autotransformers foundation drawings.	Drawings will be provided to the successful bidder during detail engineering. Bidder to quote as per BPS items.

Sl. No.	Volume / Section /Clause No.	Description	Bidders Query	POWERGRID Reply
8		General	Kindly request you to furnish us soil investigation reports and contour survey reports.	Soil investigation report will be provided to the successful bidder during detail engineering. Bidder to quote as per BPS items. Contour Survey is in the scope of the bidder. Refer section projects/Civil Works/Site levellingworks.
9	Price Schedule Sch 3 Civil Works_Sr.No. 75 & 76	Price Schedule	We would like to seek clarification regarding Sch. 3 items Sr. No. 75 and 76, which request the design of the beam and gantry structure. However, we noticed that item Sr. No. 77 already has the structural steel quantity indicated.  Could you please clarify whether the gantry structure is a standard structure, or if we need to proceed with a custom design?	Bidder to quote as per BPS items & Technical Specifications.
10	Clause 2.2.1.1 ( C ) - ii - (a)	Scope of works	Civil work for foundations of Owner-supplied Transformer and also civil work for associated Fire walls etc.  <b>We understand that only transformer foundation &amp; fire wall works for 400/220/33kV, 3-Ph Autotransformers which is under present scope and supply, erection and testing commissioning is covered under separate package. kindly Confirm ?</b>	Bidder to refer 2.2.1.1C (ii) of Section project where the scope related to associated work for Power Transformers are ample clear. transformer are considered in the BPS items for civil works .  Quantities for civil works of
11	Clause 2.2.1.1	Scope of works	The scope is includes design, engineering, manufacture, testing, supply including transportation & insurance, unloading, storage, erection, testing and commissioning.  In this regards kindly request you to confirm tentative delivery time of 500MVA transformer.	500 MVA transformer is to be supplied under separate package & tentative delivery time shall be provided to successful bidder during detailed engineering stage.
12	Clause 2.2.1.3 (iii) - Other miscellaneous requirements & scope (b)	Scope of works	We understand that Permanent water supply for Security hut, control room building, Firefighting pump house building, water tank and labor hut (if required). It is not cover in present scope and price schedule.  So, we have not cosidered in our scope please confirm our understanding is correct ?	Permanent water supply is not envisaged in the present scope. Bidder to quote as per BPS items.
13	Clause 2.2.1.3 (iii) - Other miscellaneous requirements & scope (c)	Scope of works	We understand that Laying of plumbing and external sewerage system for control room building, Security hut, labor hut (if required). It is not cover in present scope and price schedule.  So, we have not cosidered in our scope please confirm our understanding is correct ?	Laying of plumbing and external sewerage system is not envisaged in the present scope. Bidder to quote as per BPS items.

Sl. No.	Volume / Section /Clause No.	Description	Bidders Query	POWERGRID Reply
14	Clause 2.2.1.3 (iii) - Other miscellaneous requirements & scope (d)	Scope of works	<p>We understand that Slope protection works/Retaining wall (if any). The item shall be measured and paid under respective items of BPS. Preparation of Design &amp; Drawings by contractor and approval by POWERGRID is deemed to be included under this item. It is not cover in present scope and price schedule.</p> <p>So, we have not cosidered in our scope please confirm our understanding is correct ?</p>	Slope protection works/Retaining wall (if any) including preparation of Design & Drawings is in the bidders scope. Bidder to quote as per BPS items.
15	Clause 2.2.1.3 (iii) - Other miscellaneous requirements & scope (e)	Scope of works	<p>We understand that the work of Diversion of existing Nallah/ Surface runoff from external catchment area, (including design &amp; drawing), if required. The item shall be measured and paid under respective items of BPS. Preparation of Design &amp; Drawings by contractor and approval by POWERGRID is deemed to be included under this item. It is not cover in present scope and price schedule.</p> <p>So, we have not cosidered in our scope please confirm our understanding is correct ?</p>	Work of Diversion of existing Nallah/ Surface runoff from external catchment area, (including design & drawing), if required is in the bidders scope. Bidder to quote as per BPS items.
16	Clause 2.2.1.3 (iii) - Other miscellaneous requirements & scope (f)	Scope of works	<p>We understand that foundation for lighting poles, bay marshalling boxes, panels and control cubicleswherever required. The cost of these foundations shall deemed to be included in erection/installation of corresponding item/ equipment of BPS It is not cover in present scope and price schedule.</p> <p>So, we have not cosidered in our scope please confirm our understanding is correct ?</p>	The provisions of bidding document are ample clear. Bidder to quote accordingly.
17	Clause 2.2.1.3 (iv) - Other miscellaneous requirements & scope	Scope of works	<p>We understand that Structure and Foundation for transformers and reactors neutral and tertiary delta formation: Structure and foundation for neutral, tertiary delta formation for Transformers and reactors, earthing arrangement along with associated spare unit connection arrangement (if any). It is not cover in present scope and price schedule.</p> <p>So, we have not cosidered in our scope please confirm our understanding is correct ?</p>	Single Phase Transformers / Reactors are not envisaged under present scope. Bidders may quote as per TS.

Sl. No.	Volume / Section /Clause No.	Description	Bidders Query	POWERGRID Reply
18		GIS Queries	<p>Please provide following details related to - <b>Existing 220kV GIS:</b></p> <p>1.For 220kV GIS extension: -Drawing of the end module which will be extended. -Pressure in the end module gas compartments of the GIS busduct. -SF6 Density monitor details of end module.</p>	<p><b>1. For 220kV GIS extension:</b> a) The available details of existing GIS end piece (Interface) module shall be provided to successful bidder during detailed engineering stage. Further, bidders as advised to visit substation site as per clause no 1.5 of section project. b) As per existing 220kV GAS SLD, provided in tender drawings : The rated &amp; minimum functional pressure (Rel.) of the existing GIS bus duct is 0.65MPaG &amp; 0.53MPaG respectively at 20 deg. C. c) SF6 Density monitor of end module is of Trafag make. For further additional details, bidders are advised to visit site as per clause no 1.5 of section project.</p>
19		GIS Queries	<p>Please provide following details related to - <b>220kV GIS extension:</b></p> <p>-We shall maintain the 6.1 bar (relative) pressure in the common compartment between existing GIS at site and our GIS ( instead of 5.5 bar of existing GIS). Hence the differential pressure for gas tight partition of existing GIS will be 0.6 bars, kindly confirm. -Is there any special coating/ painting available on existing GIS conductors? -Kindly share detail GTP (If available )</p>	<p><b>220kV GIS extension:</b> a) As per existing 220kV GAS SLD, provided in tender drawings : The rated &amp; minimum functional pressure (Rel.) of the existing GIS bus duct is 0.65MPaG &amp; 0.53MPaG respectively at 20 deg. C. Bidder to comply the requirement of Technical specification. c) The available documents of existing 220kV GIS shall be provided to successful bidder during detailed engineering stage. However, as per clause no 1.5 of section project, bidders are advised to visit the substation sites and acquaint themselves with the topography, infrastructure and also the design philosophy.</p>
20		GIS Queries	<p>Please provide following details related to - <b>1. 400 kV Gas Insulated Switchgear:</b> -Bidder Understand, If any OEM required for Commissioning for Said Extension shall be arranged by PGCIL. Kindly Confirm Please.</p> <p><b>2. 220kV Gas Insulated Switchgear:</b> -Bidder Understand, If any OEM required for Supervision for Installation of Extension Module, During Measurement of Existing Bus Bar for the Said Extension shall be arranged by PGCIL. Kindly Confirm Please. -Hitachi India (Formerly known as ABB India) not Supporting for Supply of 03 Nos. 220kV GIS Bays along with Bus Ducts. So, Other Manufactures are required some Data from the Existing 220kV GIS Equipment for Extension of the 220kV GIS System with the Proposed Bays. So, kindly provide the Data Please. (as per Enclosed).</p>	<p><b>1. For 400 kV Gas Insulated Switchgear:</b> a) Provisions of bidding document are ample clear. Bidder to quote as per BPS items &amp; Technical Specifications.</p> <p><b>2) 220kV Gas Insulated Switchgear:</b> a) For extension of GIS, the supervisor, handling of existing GIS manufacturer and all tools and tackles as well as Hardwares/consumables/gaskets, etc. as required, are to be arranged by the bidder/contractor under present scope and the cost of the same is to be built up by bidder under GIS equipment. b) Existing 220kV GIS Layout &amp; GAS SLD had already been provided with tender documents and other available details of existing GIS shall be provided to successful bidder during detailed engineering stage. However, as per clause no 1.5 of section project, bidders are advised to visit the substation sites and acquaint themselves with the topography, infrastructure and also the design philosophy.</p>