

Prebid Queries Reply dated 07.04.25

Name of the work: Supply, Erection, Testing and Commissioning of Receiving Substation with incoming Cabling from Grid Substation including 25 kV-AC Traction cum 33kV Auxiliary Main Sub-Stations, 25kV Overhead Equipment (FOCS), Auxiliary Power Supply & Other Associated Works on Viaduct, At-Grade & Stations including Soladevanahalli Depot and SCADA System for complete Corridor 2 & Corridor 4 of BSRP and includes any modification in existing OHE /PSI if required along the alignment of C2 and C4."

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
388.	General	BoQ Part2: Employer's requirements / Chapter: Technical Specifications Part2: Employer's requirements /Chapter: GTPs	We acknowledge that the K-Ride PST tender is based on SOR, and we are expected to adhere to the BoQ. However, there are many instances where contradictions between the BoQ, Technical Specifications, and the GTPs are there for the same item descriptions. We request you to kindly provide the priority of documents.	Bidder to Refer Query No. 142
389.	Part2: Employer's requirements/Chapter 10: Traction Overhead Equipment/ Clause No.8.4 & 8.5 / Page No. 31 of 50	8.4 Light weight Section Insulators (Main Line) 8.5 Section Insulators (Depot, Tramway OHE)	We understand that the pegging plan is not given for the chainage 24/883 to 27/000 for corridor-2 and from Chainage 27/477 to 46/525 for corridor-4. We request you to kindly provide the same.	Bidder to refer Query No. 189 & 190.
390.	Part2: Employer's requirements/Chapter 10: Traction Overhead Equipment/ Clause No.5.4.2/ Page No. 19 of 50	Normally 5 pulley block type ATD shall be provided at At-Grade & depot & Spring type ATD shall be provided on the viaduct.	We understand, on viaduct Spring type ATD shall be provided. We propose you to consider the pulley type ATD with necessary anti shooting arrangement during detailed design stage. Kindly Confirm and amend the clause accordingly.	Tender Condition Prevails.
391.	Part2: Employer's requirements/Chapter 1: Introduction and Overview / Clause 2.2.3 RSS Contractor's Scope.	The Contractor shall submit Reliability, Availability and Maintainability and serviceability (RAMS) Plan to the Employer for review and approval.	Bidder understands that as per EN50126, "S" in RAMS stands for safety. Kindly provide the references for the used term "Serviceability".	Bidder to refer corrigendum no. 6, Sl. no. 4

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392.	Mainline 25kv OHE sectioning schematic diagram. Drawing number- KRDD01-TDR-CR02-GEN-OCS-SEC-00002	#UNKNOWN!	The chainages of Chikka Banvara SSP are indicated as 24+750 and the Chainages of Chikka Banvara Station as 24+488. However, the station is indicated towards the increasing chainages contradicting the above clause. Kindly clarify the chainages of Chikka Banvara SSP.	Bidder to refer corrigendum no. 6, Sl.no. 5
393.	BOQ 33kV ASS 28.8	Automatic Fire protection system for panels	Kindly provide the detailed specification for Automatic Fire Protection system for panels.	Bidder to refer clause 9 of chapter 11A, Part 2: Employer requirement and also refer query no. 90
394.	BOQ 33kV ASS 28.8	SLD	We understand SLD is missing for 33kV ASS. Request you to kindly share the SLD.	Bidder to refer drawing no. KRDD01-TDR-GEN-GEN-TPS-DWG-00026_R2 of PST_Drawings_3.
395.	Make List	33kV Dry cast resign inductive PT & CT	We understand Only 2 makes are approved for 33kV Dry cast resign inductive PT & CT. We request you to give some more options for the same and kindly accept Pragati make CT & PT.	Bidder to refer query no. 66
396.	KRDD01-TDR-GEN-GEN-TPS-DWG-00011_R1 / SLD	Earthing Switch	Kindly confirm if Earthing switch shall be provided in the Line side only.	Bidder to refer query no. 67

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397.	KRDD01-TDR-GEN-GEN-TPS-DWG-00011_R1 / SLD	Earthing Switch	Kindly confirm if the Earthing switch shall be manually operated.	Bidder to refer query no. 269
398.	KRDD01-TDR-GEN-GEN-TPS-DWG-00011_R1 / General	Cable details / Cable entry (TOP/ Bottom)	Cable details are missing. Request you to provide the same.	Bidder to refer query no. 69
399.	KRDD01-TDR-GEN-GEN-TPS-DWG-00011_R1 / SLD	CT Ratio	CT Ratio is missing in the SLD. Request you to provide the CT Ratio.	Bidder to refer query no. 271
400.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 2.1/Page No. 2 of 28	13. - Number of flip-flop contact for earthing isolator open/closed position monitoring minimum 14. - Number of flip-flop contacts for isolator open/closed	In the referred clause, we understand that the breakers with 6NO+6NC Auxiliary contacts shall be used. Kindly Confirm.	Bidder to refer query no. 272
401.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 2.1.16 /Page No. 2 of 28	Protection Degree - IP3X	We understand that the breaker panel with IP4X for overall protection and IP2X between the compartment shall be used. Kindly Confirm.	Bidder to refer query no. 273
402.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.2.2 /Page No. 17 of 103	The Switchgear in ASS shall be 36 KV, 3 phase, 50 Hz air insulated Metal clad indoor VCB type switchgear unit having SCADA/SAS Compatible facilities.	We understand, as per IEC we shall use Metal enclosed switchgear. Kindly Confirm our understanding.	Bidder to refer corrigendum no.1, Sl.no. 34
403.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.3.1/Page No. 18 of 103	All non-welded assemblies shall be assembled by means of bolts and nuts with mandatory use of lock-washers.	We understand, all assemblies shall be riveted. Kindly Confirm.	Bidder to refer query no. 275
404.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.3.1/Page No. 19 of 103	The rack in/rack out handles, earth switch handle, CB mechanical handle and spring charge handle shall be supplied individually for each 33 kV Circuit Breaker.	In the referred clause, kindly confirm the no. of handles to be provided.	Bidder to refer query no. 276
405.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.3.1/Page No. 19 of 103	Two set of PT rack in/rack out ramp, CB rack in/rack out ramps and Busbar earthing trolley (withdraw-able type) shall be supplied with each ASS.	In case, we are offering cassette type breakers . Kindly confirm, if we can provide breaker handling trolley instead of ramps.	Bidder to refer query no. 277

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406.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.5.1/Page No. 20 of 103	Fixed earthing plug-in contact	We request you to provide the plug-in contact part for earthing in trolley. Kindly confirm if scrapping type contact is also acceptable instead of plug-in contact or not.	Bidder to refer query no. 278
407.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.5.2/Page No. 20 of 103	33 kV, 1250A bar set, mounted on insulators, suited to withstand 1500 MVA peaks short-circuit.	Kindly confirm if we can propose a self-supporting bus bar in the bus bar compartment designed without any insulators, which helps to reduce partial discharge within the compartment for the referred requirement.	Bidder to refer query no. 279
408.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.5.2/Page No. 20 of 103	In principle, the bus bar shall be a rectangular cross-section To earth the Busbar during maintenance, a bus bar earthing trolley (withdraw-able type) shall also be provided.	Kindly confirm if we can propose to provide a circular hollow busbar based on type-tested design, which will enhance the cooling of the busbar.	Bidder to refer query no. 280
409.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.5.2/Page No. 21 of 103	Three display lamps for voltage on fed by capacitive dividers, annunciation lamps being installed on the front face of the cubicle	Kindly confirm if it is acceptable that the LED setup shall be installed on the rear side of the panel, as the front face will display the Breaker on/off indication.	Bidder to refer query no. 281

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410.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.5.2/Page No. 21 of 103	In case of common bus voltage, indication for presence of 33 kV Supply shall be provided in cut — off Circuit Breaker only.	Kindly provide detailed specifications.	Bidder to refer query no. 282
411.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.5.3/Page No. 21 of 103	Control and monitoring devices for the CB (programmable logic control)	We understand that this will be part of the relay, and no separate PLC will be provided for it. Kindly confirm.	Bidder to refer query no. 283
412.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.10.2/Page No. 24 of 103	The Voltage transformer shall be provided with Surge arrester.	We understand that the voltage transformer will be equipped with fuses on the primary side and an MCB on the secondary side for protection. No surge arrestors will be provided for the protection of the PT. Kindly Confirm.	Bidder to refer query no. 285
413.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.10.2/Page No. 27 of 103	Medium voltage switchgear interlocking	We request you to elaborate the mentioned clause with respective circuit diagram.	Bidder to refer query no. 286
414.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.15.1/Page No. 32 of 103	Circuit breakers shall employ vacuum interrupters and shall have busbar side integral isolation facilities, i.e. a 3-position isolator with On-Off-Earth positions.	We understand that, for the AIS switchgear, the earthing switch will be provided on the line side near the cable. Kindly Confirm.	Bidder to refer query no. 287
415.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.15.5/Page No. 32 of 103	The isolators and the associated circuit breaker which are integral parts of the switchboard shall be equipped with mechanical interlocking to ensure that the isolators cannot be operated unless the associated CB is opened. For the same reason, motorised isolator shall be installed with electrical interlock to provide the same interlocking logic	We understand electrical interlock shall be provided. Kindly confirm if the bidder can propose to provide manually operated earthing switch as an alternative to the electrical interlock.	Bidder to refer query no. 288

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416.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.15.7/Page No. 32 of 103	All earth bars and terminals including those in the switchboard and inside the ASS shall be tinned copper.	We understand that tinned copper is to be used for all earth bars and terminals, including those in the switchboard and inside the ASS. Kindly confirm if the bidder can propose to provide panels that are type-tested without tinning on the earth bus.	Bidder to refer query no. 289
417.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.15.10/Page No. 34 of 103	Cable connection shall be bottom/top entry as per the locations of the ASS	We understand Cable connection shall be bottom/top entry as per the locations of the ASS. Kindly clarify whether the cable connection will be from the top/bottom, as this will impact the panel's depth and design	Bidder to refer query no. 290
418.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.3.15.12/Page No. 34 of 103	Secondary connection wirings shall have a minimum size of 4mm copper conductors.	We understand that conductors with a minimum size of 4mm should be used for secondary wiring. However, the secondary current in the CT circuit will be limited to 1A / 5A. Kindly confirm if the bidder can propose to use 2.5 sq. mm cables instead of 4 sq mm.	Bidder to refer query no. 291

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419.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 4.3.1 /Page No. 48 of 103	The Relay shall have IEC 60870-5- 103, IEC 61850, Modbus, DNP3 communication protocol for system communication and USB /RS232/RS485 / RJ45 (Ethernet) port	We understand that the offered relay can support only one communication protocol at a time; it will not be possible to use multiple protocols simultaneously. Kindly Confirm.	Bidder to refer query no. 292												
420.	Section VII Vol.II – TECHNICAL SPECIFICATION /Chapter 13B: 220kV Receiving substations (GTP)/Cl. 1.1 /Page No. 03 of 63 BOQ / Cl. 13.1.1/Traction Transformer	GTP: 1.1 220kV/27.5kV Traction Transformer <table><tr><td>Rated frequency</td><td>50</td><td>Hz</td></tr><tr><td>Rated secondary power</td><td>1000</td><td>MVA</td></tr><tr><td>Cooling mode</td><td></td><td>ONAN</td></tr><tr><td>Dimensional data for foundation</td><td></td><td>10000</td></tr></table> BOQ: 220/33 kV, 15/20 MVA (ONAN/ONAF) Auxiliary Main Transformer including Terminal Connectors with Nitrogen Injection Fire Prevention System (NIFPS) with all accessories	Rated frequency	50	Hz	Rated secondary power	1000	MVA	Cooling mode		ONAN	Dimensional data for foundation		10000	The 220kV/27.5kV Traction Transformer rating is specified as 30/40 MVA in the mentioned chapter. However, the rating in the BOQ states 40/50 MVA. Kindly clarify which rating should be considered.	Bidder to refer query no. 325
Rated frequency	50	Hz														
Rated secondary power	1000	MVA														
Cooling mode		ONAN														
Dimensional data for foundation		10000														
421.	Section VII Vol.II – TECHNICAL SPECIFICATION / Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS /Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	i)Scope of Work SF6 gas piping	We understand that given GIS incorporates a panel-wise compartmentalized design for the busbar and circuit breaker, eliminating the need for gas handling during site installation. As a result, piping shall not be necessary for this arrangement. Kindly Confirm our understanding.	Bidder to refer query no. 36												

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422.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	i) Scope of Work a) Incomer Bay each Consisting of: Indoor lightning arrestor -1No with surge arrestor counter on GIS and having • SCADA communicability on IEC 61850 protocol. They shall also indicate the • value of the leakage current	We understand that the relays will be compatible with SCADA systems using the IEC 61850 protocol. The surge counter shall be non-communicative and shall only display the surge count. Kindly confirm our understanding.	Bidder to refer query no. 37
423.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	i) Scope of Work b) Outgoing Feeder Bay Each Consisting of Indoor lightning arrestor -1No with surge arrestor counter on GIS and having SCADA communicability on IEC 61850 protocol. They shall also indicate the value of the leakage current	We understand that the relays will be compatible with SCADA systems using the IEC 61850 protocol. The surge counter will be non-communicative and will only display the surge count. Kindly confirm our understanding.	Bidder to refer query no. 38
424.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	ii) Main features required: c) Bus zone wise busbar segregation should be provided with gas monitoring system for each bus zone.	The GIS shall be featured with a panel-wise compartmentalized design for the busbar, 3-position switch and circuit breaker with individual gas density monitoring for each compartment. Kindly Confirm the same.	Bidder to refer query no. 39
425.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	ii) Main features required: l) All gas sampling shall be possible during normal operation and without loss of gas.	We understand that since no gas handling is required at the site, no gas tests will be applicable on-site. Kindly Confirm the same.	Bidder to refer query no. 40

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426.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	ii) Main features required: q) The Switchgear panel should be of modular design with a flanged connection between circuit breaker and busbar compartment.	We understand that, according to the compartmentalized design, the busbar and circuit breaker are fully isolated from each other. Kindly Confirm the same.	Bidder to refer query no. 41
427.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	ii) Main features required: r)duty cycle of O- 0.3s-CO-15s -CO	Kindly confirm if the bidder can propose to provide duty cycle-O-0.3 s-CO-3 min-CO for the switchgears.	Bidder to refer query no. 42
428.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	ii) Main features required: t) In case of any replacement or extension of switchgear panels at site it should be possible to replace or add a fully assembled circuit breaker without interfering the operation of the adjacent feeder as well as without any bus zone degassing. All circuit breaker of same rating should be interchangeable.	Adding or replacing any panel in the switchboard lineup shall not require degassing at the site. Additionally, the adjacent circuit breaker will remain undisturbed during this process. A brief shutdown of the specific bus section where the panels are being added or replaced shall be necessary for operator safety. However, we recommend a short shutdown of the entire switchboard lineup during this activity. Request you to kindly consider the same.	Bidder to refer query no. 43
429.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	a) Cable Termination Kit: • Outgoing feeders are two runs of 240 sq.mm copper / Aluminium cable	Kindly confirm if for all 25kV feeders, the end cable termination size required is 2R*240sqmm.	Bidder to refer query no. 45
430.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	a) Cable Termination Kit: • Outgoing feeders are two runs of 240 sq.mm copper / Aluminium cable • Technical Specification : Rated Current 2000A @ 40°C , 2400A for 5 mins	We understand, two runs of 240 sq.mm shall not be sufficient to carry 2000A. We request you to kindly check on the requirement of cable kit and current rating.	Bidder to refer query no. 46

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431.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS	Primary connectors 27.5kV connectors shall be made of bronze pipe 20, length 60mm.	We understand that the given GIS features with a panel-wise compartmentalized design & pluggable type VT. However, piping is not applicable for the same. Kindly Confirm.	Bidder to refer query no. 48
432.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/ Cl. 2.9.2.1 Voltage transformers	Secondary connecting box Secondary winding connection will be realized through a dust-proof and watertight type (IP55) connecting box fitted with a 6.3 A fuse and able to receive 2x10mm ² screen-cable	We understand, panels are designed for indoor use with an IP4X protection rating and the VTs are installed inside the switchgear panels, the IP55 rating shall not be applicable. Fuses are not applicable for GIS. For protection purpose an MCB on the PT secondary side can be used. Kindly Confirm.	Bidder to refer query no. 49

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433.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS/ Cl. 2.9.2.2 Current transformers	Secondary connecting box Secondary winding connection will be realized through a dust-proof and watertight type (IP55) connecting box and able to receive 2x10mm ² copper screen-cable.	Please note that PT circuits shall be wired with 1.5 sq.mm wire. Based on our experience from previous projects, using 10 sq.mm wire creates challenges when preparing wire bundles and makes it difficult to close-Open the panel door. Therefore, we request you to kindly allow us to use 1.5 sq.mm wire.	Bidder to refer query no. 50
434.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS / Cl. 3.1.3 Protection Descriptions	i) Hydraulic or Thermal Protections	We understand that the Hydraulic or Thermal Protections are not applicable for provided product. Kindly Confirm.	Bidder to refer query no. 52
435.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS / Cl. 3.8 RELAY AND PROTECTION PANELS	The panels shall be used for housing the control and protection equipment for 220/132/66 kV and 25 kV system	Kindly confirm if the requirement is for separate CRP for 25KV GIS.	Bidder to refer query no. 53
436.	BOQ (Tender Price bid) / Sheet B2	#UNKNOWN!	Kindly confirm if the requirement is for separate CRP for 25KV GIS.	Bidder to refer query no. 54
437.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS / Cl.4.4 25KV CABLES	Cable of copper conductor with cross section of 240 sq. mm. is generally used; however different cross section may also be used as required subject to approval of engineer.	We understand that for all 25kV feeders, the end cable termination size required is 2R X 240sqmm. Kindly confirm.	Bidder to refer query no. 56
438.	General	CT and PT ratios	Request you to provide Current Transformer & Voltage Transformers ratios and specifications. Kindly provide same to confirm the CT & VT data feasibility.	Bidder to refer query no. 57
439.	General	Paint	Kindly confirm if the CRCA section can be powder coated using the seven-tank procedure, with the paint shade being RAL7032/RAL7035.	Bidder to refer query no. 60

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440.	Section VII Vol.II – TECHNICAL SPECIFICATION / Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS /Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	Rated voltage kV: 52	Kindly confirm if we can provide 27.5kV rated voltage with a power frequency of 95kV and a 200kVp rating.	Bidder to refer query no. 61
441.	Section VII Vol.II – TECHNICAL SPECIFICATION / Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 13A: 220 kV RECEIVING SUBSTATIONS /Cl. 2.8.5 Indoor 25 kV Gas Insulated Switchgear (GIS)	Breaking capacity 31.5KA	We understand as per SLD & as per TS (Cl. 2.8.5), the STC mentioned is 16kA. Kindly confirm same.	Bidder to refer query no. 62

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442.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.2.6/Page No. 23 of 103	Paintwork	Alu Zinc is light in weight, has more strength, and extremely corrosion resistant compared to normal CRCA sheets and this does not require any surface treatment like powder coating. Panels made up of Alu Zinc material except front doors & end covers which shall be painted sheet steel. Powder coated paint can be provided for front doors and end covers, which shall be made of CRCA sheet. However, painting procedure and thickness shall be as per standard procedure. Kindly confirm if the above is acceptable or not.	Bidder to refer query no. 284
443.	Section VII Vol.II – TECHNICAL SPECIFICATION / CHAPTER 11B: Auxiliary Substations (GTP)/Cl. 3.4.2.7/Page No. 23 of 103	IP 3X for the partition between compartments	Kindly confirm if it is acceptable to propose degree of protection for total enclosure as IP4X and within compartments as IP2X.	Bidder to refer query no. 89

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444.	BoQ- Bill No. B1, Item No. 1.1 Work Description of HVC-S & HVC-E 220 kV Cable & Part2: Employer's requirements/Chapter 13B: 220kV Receiving substations (GTP) /Cl. No. 16 / Page No. 33 of 63	Bill No. B1, Item No. 1.1 Work Description of HVC-S & HVC-E 220 KV cable specifies, 127/220 KV (Earthed) 1Cx 1000 Sqmm Stranded annealed copper conductor, segmental compacted circular (Milliken) conductor screen cross linked Polyethylene (XLPE) insulation, core screen, semiconducting water swellable layer, Lead alloy E sheathed semiconducting bedding tapes, helically applied plain round copper wire screen, plain copper tape in open helix, water swellable tape with overall extruded high density polyethylene sheath coated with graphite/ extruded semiconducting layer and anti-termite treated as per TS. Cl.16 220KV CABLES (AS PER KPTCL SPECIFICATION)	We understand that the mentioned clause in Chapter 13B Cl.no. 16, 220kV cables (as per KPTCL Specification) stipulates the cable description and size same as per Item No.1.1 Work Description of HVC-S & HVC-E 220 KV Cable but the details mentioned for conductor composition, cable diameter, area of copper wire screen, DC/AC Resistance and all electrical parameters are of 220 kV, 1200 Sq.mm instead of 1000 Sq.mm. Kindly confirm the required cable size. If cable size is 1000 Sq.mm, kindly amend the Cl.no. 16 of Chapter 13B as per KPTCL specification with details/dimensions of 220kV 1000 Sq.mm cable.	Bidder to refer Corrigendum-1, Sl.No. 79
445.	Part2: Employer's requirements/ Chapter 13A: 220kV Receiving substations/ Cl. No. 4.2.1/ Cl. No. 4.2.4 & Chapter 13B Cl.No.16	Clause no. 4.2.1 of Chapter 13A (page no. 130) specifies short circuit rating as 40 kA for 3 second and Clause No. 4.2.4 (vi) of Chapter 13A (page no. 134) calls for short circuit rating of metallic sheath corrugated aluminium or copper sheath as 31.5 kA for 1 second whereas Clause No. 16 Sl. No 18(i) of Chapter 13B as per KPTCL specification specifies short circuit rating of metallic sheath (Lead sheath & copper wire screen combined) 50 kA for 1 second.	Kindly confirm the type of metallic sheath required i.e., Lead sheath (combination of lead sheath & copper wire screen) OR Aluminium corrugation OR Copper corrugation. Additionally, kindly confirm the short circuit rating of metallic sheath i.e., 40 kA for 3 second OR 31.5 kA for 1 second or 50 kA for 1 second (as per KPTCL Specification).	Bidder to Refer corrigendum no. 1, Sl. no. 39

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
446.	Part2: Employer's requirements/ Chapter 13A/ Cl.no.. 4.2.3 / Cl.no. 4.2.4 & Chapter 13B Cl.no.16	Clause No. 4.2.3 of Chapter 13A (page no. 130) specifies that the conductor shall be Stranded circular copper. Clause No. 4.2.4 (i) of Chapter 13A (page no. 132) states that the conductor shall be of Aluminium whereas Clause No. 16 Sl. No. 10(b) of Chapter 13B as per KPTCL specification calls for conductor of Annealed plain copper with segmented (Milliken) shape.	Kindly confirm the conductor material i.e., Aluminium OR Copper and the shape of conductor i.e., stranded compacted circular or Segmented Milliken in line with KPTCL Specification.	Bidder to Refer corrigendum no. 1, Sl. no. 76

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
447.	Part2: Employer's requirements/ Clause No. 4.2.4 (iii) of Chapter 13A (page no. 132) & Clause 16 Sl. No. 12 of Chapter 13B	Clause No. 4.2.4 (iii) of Chapter 13A (page no. 132) states voltage gradient at internal semiconductor as 6 KV/mm and 3 KV/mm at external semiconductor whereas Clause No. 16 Sl. No. 12 of Chapter 13B specifies electrical stress at conductor screen 7.49 kV/mm and 3.6 kV/mm at insulation screen .	We understand that the Electrical stress is calculated based on Conductor size, Voltage grade and Thickness of insulation. As per KPTCL Specification of 220 kV cable, insulation thickness is Nominal 25.0 mm and accordingly, Electrical Stress for 220 kV 1000 Sq.mm cable shall be i)for Conductor screen 7.64 kV/mm ii) for Insulation screen 3.55 kV/mm Kindly Confirm.	Bidder to Refer corrigendum no. 1, Sl. no. 76
448.	Part2: Employer's requirements/ Cl.no. 21 EHV Cable	Type & Routine test details	We understand, IEC 62067 is the governing Specification of the 220kV cable. Therefore, kindly confirm that the Type test/ Routine test/ Acceptance test shall be as per IEC 62067.	Bidder to Refer Corrigendum No.1, Sl.no 107
449.	Part2: Employer's requirements/Chapter 13B/Cl.no. 16/220 kV Cables (as per KPTCL Specification), Sl. No. 29 c)	This Clause states HDPE Pipe of 160mm.	We understand that the suitable size of HDPE Pipe for 220kV cable is 250mm diameter instead of 160mm diameter. Kindly Confirm.	Cables shall be passed through suitable grade High Density Polyethylene (HDPE) of min. diameter equal to atleast 1.5 times diameter of cable and also refer BoQ item no. 3.2.6 of Bill no. B1.
450.	Notes 2 of Bill No. B1, Item No. 1.1 Work Description of HVC-S & HVC-E 220 kV Cable and Clause No. 4.2.8 a) & Part2: Employer's requirements / Chapter 13A/ Cl.no. 4.2.9	Notes 2 of Bill No. B1, Item No. 1.1 Work Description of HVC-S & HVC-E 220 kV Cable and Clause No. 4.2.8 a) specifies that Type test should not be more than 5 years old whereas Clause No. 4.2.9 of Chapter 13A states that the Type Test Report should not be older than 10 years.	We understand that as per the guidelines of the Government of India, Central Electricity Authority (CEA), the Type Test of EHV Cables are valid for 10 years. kindly confirm that the Type Test shall be governed as per the Specification IEC 62067 and Type Test is not required to be repeated if valid Type Test Report is available meeting the requirements of IEC 62067 Clause No. 12.2 and the guidelines of CEA, Govt. of India which is also in line with KPTCL norms. Kindly Confirm.	Bidder to Refer Corrigendum No. 6, Sl.no 13

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
451.	Part2: Employer's requirements / Chapter 13A / Cl.no. 4.2.9	As per this Clause, the type test reports of the equipment shall be of the tests carried out either at the manufacturer's works having requisite facilities or at KEEMA Netherlands, CESI Milano Italy and CPRI India during the last 10 years as on the date of bid vendor approval.	We understand that only three testing laboratories i.e., KEEMA Netherlands, CESI Italy and CPRI India have been mentioned in the given Clause. IPH Germany and FGH Germany are also the part of CESI, therefore we request you to confirm that the Type Test Report issued by IPH & FGH are acceptable for this project as the same is accepted by KPTCL.	Tender condition prevails.
452.	Section IX: Particular Condition of Contract (PCC) /Cl.no. 13.7 of and Section XII: Pricing Schedule/ Cl.no. 2.10.2	Price Variation	We understand that the Price Variation is applicable for 220kV cable as per the latest IEEMA Price Variation Formula applicable for the EHV cables i.e., Cir. No. 22/DIV/CAB/05 dated 07 June 2023. Kindly confirm our understanding.	Price Variation is applicable for 220kV cable as per the latest IEEMA Price Variation Formula for the EHV cables. Bidder to Refer Corrigendum No.1, Sl.no 9

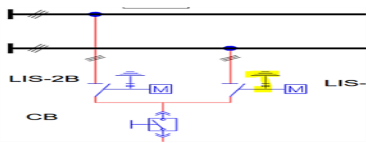
Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
453.	Part2: Employer's requirements / Chapter 13A / Cl.no. 4.2.4 & Chapter 13B/Cl.no.16 (220KV Cables (As per KPTCL Specification)	Clause No. 4.2.4 (viii) of Chapter 13A - 220kV cable outer sheath shall be extruded red/yellow/blue colour or similar Chapter 13B, 16 (220KV Cables (As per KPTCL Specification), Sl. No. 21 - Outer sheath shall be Extruded Black HDPE	We understand mentioned clause states that 220kV cable outer sheath shall be extruded red/yellow/blue colour or similar whereas Cl.no.16 of chapter 13B (220KV Cables (As per KPTCL Specification), Sl. No. 21 specifies that Outer sheath shall be Extruded Black HDPE. Kindly confirm the colour of outer sheath of 220kV cable.	Outer sheath shall be Extruded Black HDPE complying to IEC 62067
454.	Part2: Employer's requirements / Chapter 13A / Cl.no. 4.2.12 (f) & (g)	Clause no. 4.2.12 (f) calls for Ovality & Eccentricity Test and Clause no. 4.2.12 (g) calls for Short Circuit Test.	We understand that the Ovality & Eccentricity Test and Short Circuit Test are not required to be repeated against the order if valid Reports are available for these Tests. Kindly confirm our understanding.	Tender Conditions Prevails.
455.	Part2: Employer's requirements / Chapter 13A/2.2 EHV Gas insulated Switchgear (GIS) 2.2.1 Scope of Work	(A) For RSS: I. Each Incomer Bay (2 Nos.) II. Each Transformer Feeder Bay (4 Nos.) III. Each Bus Coupler Bay (1 No.) IV. Each Bus	We understand there are 4 nos of substations. Kindly confirm if all four substations shall have same configuration and same number of bays.	Bidders to refer BoQ Item no. 6 of Bill no. B2. For Soladevanahalli Depot RSS, the requirement of coupling feeder shall be decided during detailed engineering stage.
456.	Part2: Employer's requirements / Chapter 13A /2.2 EHV Gas insulated Switchgear (GIS) 2.2.1 Scope of Work	(A) For RSS: I. Each Incomer Bay (2 Nos.) consisting of: • Bus end Maintenance earth Switch – 2 No.	We understand that for earthing of whole bus, the high-speed earthing switch shall be provided in M&E (bus measurement & earthing). However, separate bus earth for each incomer line bay is not required. Kindly accept the same.	Tender Conditions Prevails.

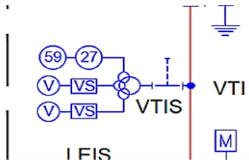
Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
457.	Part2: Employer's requirements / Chapter 13A /2.2 EHV Gas insulated Switchgear (GIS)/ 2.2.4 Main Features Required	2) All voltage level GIS as offered should be fully type tested as per latest IEC standards at the time of vendor approval and type test report should not be more than 5 years old at the time of LOA.	We understand that, as per CEA guideline type test certificate validity is 15 Years. Kindly accept the same.	Bidder to refer Corrigendum - 6, Sl.No. 15
458.	Part2: Employer's requirements / Chapter 13A/2.2 EHV Gas insulated Switchgear (GIS) 2.2.4 Main Features Required	26) Monitoring of Gas in the enclosure: Each gas compartment should have its own SF6 pressure monitoring facilities as well as static filters. Pressure relief devices shall be designed to limit maximum pressurize below the busting level of the enclosure and barrier insulation. Instruments communicable to SCADA shall be provided to continuously monitor the Gas density.	Kindly confirm whether conventional density monitors are required, or density monitor with a 4-20mA output is necessary.	Tender condition prevails. 4-20mA output is necessary for SCADA communication.
459.	Part2: Employer's requirements /4.1.2. 220kV Circuit Breaker, 2 phases (GIS)	4.1.2. 220kV Circuit Breaker, 2 phases (GIS)	Kindly confirm if 2-Phase GIS circuit breaker is applicable for this project.	2 phase GIS circuit is applicable for Traction Transformer feeder
460.	Part2: Employer's requirements /5.1.2. 220kV Isolator, 2 phases (GIS)	5.1.2. 220kV Isolator, 2 phases (GIS)	Kindly confirm if 2-Phase GIS Isolator is applicable for this project.	2 phase GIS circuit is applicable for Traction Transformer feeder

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
461.	Part2: Employer's requirements /5.1.2. 220kV Isolator, 2 phases (GIS Explanatory note RSS BOQ 2 BILL NO. B2. GIS-S-GIS-E 220KV RSS ITEM NO.6.1: 220 KV GIS INCOMING BAYS	2 BILL NO. B2. GIS-S-GIS-E 220KV RSS ITEM NO.6: 220 KV GIS SWITCHGEAR ITEM NO.6.1: 220 KV GIS INCOMING BAYS The price shall include the cost of supplying each 220 kV GIS incoming bay, as per Employer's requirements and drawings, mainly consisting of - Circuit Breaker— 1 No. - Current Transformer— 1 No - Maintenance Earth Switch — 1 No. - Line Disconnecter— 1 No. - Line Earth Switch (Fast acting) – 1 No - Voltage Transformer with integrated isolation devices suitable for high voltage DC testing of cables. - Indoor lightning arrestor- 2 Nos - Bus Disconnecter Switch — 2 Nos. - Bus end Maintenance Earth Switch — 1 No.	1. Kindly confirm whether the incoming bays are of 3-phase or 2-phase. 2. For busbar earthing high speed earth switch shall be provided in Bus VT & Bus earth (M&E) bay, so separate earth switch for each line bay for bus earth is not envisaged. Kindly confirm. 3. Kindly confirm the quantity of surge arrester, as GIS is 3-phase system so the quantity should be 3 Nos. per bay.	1. incoming bays are 3-phase only. 2. Bidder to Refer query No. 456 3. Bidder to Refer corrigendum no. 6, Sl. no. 1

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
462.	Explanatory note RSS BOQ 2 BILL NO. B2. GIS-S-GIS-E 220KV RSS ITEM 6.2: 220KV TRACTION TRANSFORMER FEEDING BAY	ITEM 6.2: 220KV TRACTION TRANSFORMER FEEDING BAY: The price shall include the cost of supplying each 220kV GIS outgoing bay, as per Employer's requirements and drawings, mainly consisting of - Circuit Breaker— 1 No. - Current Transformer— 1 set. - Maintenance Earth Switch (Transformer Side) – 1 No - Bus side Earth Switch (Bus Side) — 1 No. - Bus Disconnectors — 2 Nos. - Indoor lightning arrestor – 1 set	Kindly confirm the requirement of line side disconnector.	Tender conditions prevails.
463.	Explanatory note RSS BOQ 2 BILL NO. B2. GIS-S-GIS-E 220KV RSS ITEM 6.3: 220KV AUXILIARY TRANSFORMER FEEDING BAY	ITEM 6.3: 220KV AUXILIARY TRANSFORMER FEEDING BAY The price shall include the cost of supplying each 220kV GIS outgoing bay, as per Employer's requirements and drawings, mainly consisting of - Circuit Breaker— 1 No. - Current Transformer— 1 set. - Maintenance Earth Switch (Transformer Side) – 1 No - Bus side Earth Switch (Bus Side) — 1 No. - Bus Disconnectors — 2 Nos. - Indoor lightning arrestor – 1 set	Kindly confirm the requirement of line side disconnector.	Tender conditions prevails.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
464.	DOC : 0.1 Explanatory note RSS BOQ 2 BILL NO. B2. GIS-S-GIS-E 220KV RSS ITEM 6.5: BUS VT MODULES AND BUS BARS AND OTHER ITEMS AS PER SPECIFICATIONS.	ITEM 6.5: BUS VT MODULES AND BUS BARS AND OTHER ITEMS AS PER SPECIFICATIONS. - Voltage Transformer — 2 No. - Bus Disconnectors & Earth Switch — 2 Nos.	Kindly confirm whether busbar earth switches shall be considered in a BUS VT bay (M&E Bay).	Provision of Busbar earth switches in BUS VT bay shall be finalized during detail engineering stage.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
465.	Part2: Employer's requirements Chapter 13A: 220kV Receiving substations / Cl 4.3.4.9, Cl. 4.4.5 & Cl 4.5.5 Chapter-13B-220 kV RECEIVING SUBSTATIONS (GTP)	4.3.4.9 & 4.4.5 Armoring: Double Tape Aluminum armoring should be applied over the inner sheath and the thickness of the same should be as per IEC 60502. 4.5.5 Armouring Double Tape armouring should be applied over the semi-conducting water swellable tape and the thickness of the same should be as GTP attached. A layer of FRLSZH/FRLS binder tape shall be applied over armour.	We understand, in Chapter:13A-Specification of 3.3kV, 25kV & 33kV Cables includes armouring. However, In Chapter-13B-220 kV RECEIVING SUBSTATIONS (GTP)- Nothing has been mentioned related to Armouring and the specified sizes for the 33kV cables differ from those in Chapter 13A. Kindly provide details for the requirement.	Bidder to refer corrigendum -1, Sl.no. 40.
466.	Customer SLD & BOQ	Bay quantity in SOLDEVANAHALLI DEPOT RSS As per BOQ total no of bays in Soldevenhalli = 8 bays As per SLD(KRDD01-TDR-GEN-GEN-TPS-DWG-0001) total no of bays in Soldevenhalli = 7 bays	We have observed discrepancy in bay quantity between BOQ & SLD, in Soldevenhalli SS, 2 line bays are required. Kindly confirm which of the two is to be considered.	Bidders to refer BoQ Item no. 6 of Bill no. B2. For Soladevanahalli Depot RSS, the requirement of coupling feeder shall be decided during detailed engineering stage.
467.	Customer SLD	Double ES at busbar side 	We understand that it is sufficient to provide single common maintenance earth switch at busbar side, which is type tested on GIS as per this philosophy & IEC requirement. The same design has been supplied & accepted by various reputed utilities in India and abroad. We request you please accept the same.	Tender Conditions Prevails.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
468.	Part2: Employer's requirements / Chapter 13B: 220kV Receiving substaions (GTP) & SLD/6.1 Current transformer	CT Core numbers: As per SLD(KRDD01-TDR-GEN-GEN-TPS-DWG)- 7 nos As per Part2: Employer's requirements Chapter 13B: 220kV Receiving substaions (GTP) - 5 nos	We have observed discrepancies about CT cores in SLD & Particular specification document & understand that only 5 cores are sufficient. Kindly confirm our understanding.	Bidder to consider CT cores as per GTP under Chapter 13B - Clause 6.1
469.	Customer SLD&Part2: Employer's requirements/Chapter 13B: 220kV Receiving substaions (GTP) /Cl.6.1.3	VT secondary cores 	We observed the VT core discrepancy in SLD & Specification document, as per SLD it is shown three secondary windings shall be provided in VT however as per specification only metering core is mentioned. Kindly confirm, if 3 cores required then request you to share the core details.	Bidder to Refer corrigendum no. 6, Sl. no. 2
470.	Part2: Employer's requirements /Chapter 13A: 220kV Receiving substaions/Cl.2.2.4 (8)	Future extension requirement GIS should be of modular design, and it should be possible to add feeder bays for two additional incomers, if required on either end. The layout of GIS equipment and transformers should show space earmarked along with suitable cut outs for the future provision	As per received layout drawings, it seems future bay space is not considered. If there is requirement of future bays, we request you to please update/share updated building size.	Bidder to consider future provisions for building design as per tender document/drawing.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply																																		
471.	General	Partial discharge measurement system	We understand that in the GIS generally partial discharge measurement is required for insulation checking. In given Technical specification & Special tool list BOQ partial discharge measurement kit is not mentioned anywhere. Kindly confirm the requirements.	Tender Conditions Prevails.																																		
472.	PART 2: EMPLOYER’S REQUIREMENTS CHAPTER 11A: Auxiliary Substations	<table><tr><th colspan="2">Transformer Capacity</th></tr><tr><th>AN (Air Natural)</th><th>AF (Air Forced)</th></tr><tr><td>200 kVA</td><td>N/A</td></tr><tr><td>315 kVA</td><td>N/A</td></tr><tr><td>400 kVA</td><td>N/A</td></tr><tr><td>500 kVA</td><td>N/A</td></tr><tr><td>630 kVA</td><td>N/A</td></tr><tr><td>800 kVA</td><td>N/A</td></tr><tr><td>1000 kVA</td><td>N/A</td></tr><tr><td>1600 kVA</td><td>N/A</td></tr><tr><td>1600 kVA</td><td>2000 kVA</td></tr><tr><td>2000 kVA</td><td>N/A</td></tr><tr><td>2500 kVA</td><td>2500 kVA</td></tr><tr><td>3150 kVA</td><td>N/A</td></tr><tr><td>3500 kVA</td><td>3000 kVA</td></tr><tr><td>4125 kVA</td><td>N/A</td></tr><tr><td>4125 kVA</td><td>4000 kVA</td></tr></table>	Transformer Capacity		AN (Air Natural)	AF (Air Forced)	200 kVA	N/A	315 kVA	N/A	400 kVA	N/A	500 kVA	N/A	630 kVA	N/A	800 kVA	N/A	1000 kVA	N/A	1600 kVA	N/A	1600 kVA	2000 kVA	2000 kVA	N/A	2500 kVA	2500 kVA	3150 kVA	N/A	3500 kVA	3000 kVA	4125 kVA	N/A	4125 kVA	4000 kVA	We understand that all the transformers are with AN rating only and no AF cooling is requested. Kindly Confirm.	All Dry type transformers are AN rating.
Transformer Capacity																																						
AN (Air Natural)	AF (Air Forced)																																					
200 kVA	N/A																																					
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3150 kVA	N/A																																					
3500 kVA	3000 kVA																																					
4125 kVA	N/A																																					
4125 kVA	4000 kVA																																					
473.	PART 2: EMPLOYER’S REQUIREMENTS Section VII Vol-II: Technical Specification Chapter 11B: Auxiliary Substations (GTP)	Clause No. 11. Auxiliary Transformer Rated lightning impulse withstand voltage for primary winding-170kV	In GTP and Specification, the peak value of Rated lightning impulse withstand voltage is contradictory. Kindly confirm.	Bidder to Refer corrigendum no. 6, Sl. no. 3																																		
474.	PART 2: EMPLOYER’S REQUIREMENTS CHAPTER 11A: Auxiliary Substations	Clause No.3, TECHNICAL REQUIREMENTS: Rated lightning impulse withstand voltage(peak value) (for HV winding)-200kV	In GTP and Specification, the peak value of Rated lightning impulse withstand voltage is contradictory. Kindly confirm.	Tender condition prevails.																																		
475.	PART 2: EMPLOYER’S REQUIREMENTS CHAPTER 11A: Auxiliary Substations	Off load tap link (Not Required for 200 KVA or less rating transformers) 0, +2.5%, +5%	Both clauses are contradictory. As per Clause 3, we understand that 200kVA transformer without any tapings on HV coil shall be provided. Kindly confirm.	Bidder to Refer corrigendum no. 6, Sl. no. 3																																		

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
476.	PART 2: EMPLOYER'S REQUIREMENTS CHAPTER 11A: Auxiliary Substations	Clause No.5. DATA SHEET - AUXILIARY TRANSFORMERS 5.1 AUXILIARY TRANSFORMER 200 KVA, S.No.14. Voltage setting (Off load tap links)-+5.0, +2.5, 0, -2.5, -5.0 (in%)	Both clauses are contradictory. As per Clause 3, we understand that 200kVA transformer without any tapings on HV coil shall be provided. Kindly confirm.	Bidder to Refer corrigendum no. 6, Sl. no. 3
477.	PART 2: EMPLOYER'S REQUIREMENTS CHAPTER 11A: Auxiliary Substations	Clause No.3.1, ACCESSORIES • off circuit tap links with protection covers • Fans with wiring up to scanner box, if applicable	We understand that Transformers shall be provided with enclosures; hence separate protection cover for tapping is not necessary. Kindly confirm. We Understand that only AN rated transformer shall be provided; therefore, the fans are not applicable. Kindly confirm.	Tender condition prevails.
478.	PART 2: EMPLOYER'S REQUIREMENTS CHAPTER 11A: Auxiliary Substations	Clause No.3.4.1 TRANSFORMER CUBICLE The cubicle shall have space for installation of snubber circuit and Surge Arrester on HV side of transformer.	We understand that the space shall be provided for installation of snubber circuit. In case Snubber circuit is not applicable, will Phase to Phase and Phase to Earth surge arresters on HV side is acceptable. Whether Surge counter shall be provided for Phase to Earth surge arrestors or not. Kindly confirm.	Tender condition prevails. Bidder to consider Surge arresters with surge counter as per tender document.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
479.	PART 2: EMPLOYER'S REQUIREMENTS CHAPTER 11A: Auxiliary Substations	"3.10 TRANSIENT OVERVOLTAGE PROTECTIONS: - Clause No.3.10.2 Snubber circuit and surge arrestors of suitable ratings at the HV terminal of Transformer to be provided. Design for the same to be submitted to engineer for approval."	We understand that the space shall be provided for installation of snubber circuit. In case Snubber circuit is not applicable, will Phase to Phase and Phase to Earth surge arresters on HV side is acceptable. Whether Surge counter shall be provided for Phase to Earth surge arrestors or not. Kindly confirm.	Tender condition prevails. Bidder to consider Surge arresters with surge counter as per tender document.
480.	PART 2: EMPLOYER'S REQUIREMENTS CHAPTER 11A: Auxiliary Substations	"3.10.1 Surge Arresters/Snubber circuit:- Surge Arresters/ RC Snubber circuit shall be provided between Phase - Phase, and Phase - Earth, on all three phases, of suitable rated values on 33 kV side of Transformers. The surge counters for each Surge arrester should be provided."	We understand that the space shall be provided for installation of snubber circuit. In case Snubber circuit is not applicable, will Phase to Phase and Phase to Earth surge arresters on HV side is acceptable. Whether Surge counter shall be provided for Phase to Earth surge arrestors or not. Kindly confirm.	Tender condition prevails. Bidder to consider Surge arresters with surge counter as per tender document.
481.	PART 2: EMPLOYER'S REQUIREMENTS CHAPTER 11A: Auxiliary Substations	Clause No.6.3ENVIRONMENT, CLIMATE & FIRE BEHAVIOUR CLASS - To establish above classes, Transformer should be tested As per IEC 60076-11, and reports should be submitted along with the vendor approval. The dry type of transformer shall be rated for following classes –Environment Class E2, Climatic Class C1/C2 and Fire behaviour Class F1 -	We understand existing test reports of transformer for E, C & F class shall be applicable. Kindly confirm.	Tender Conditions Prevails.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
482.	PART 2: EMPLOYER'S REQUIREMENTS CHAPTER 11A: Auxiliary Substations	Clause No.6.6 CHOPPED WAVE LIGHTNING IMPULSE TEST FOR LINE TERMINALS (LIC) (SPECIAL TEST): - Chopped wave Lightning Impulse test for Line terminals (LIC) (Special test) shall be conducted as per IEC 60076-3 on all the windings, for one transformer of each type of kVA rating, being supplied in the contract. The test voltage for LIC test shall be 220 kV for 33 kV (Um=36 kV) windings	We understand, as per IS: 2026-11 chopped impulse withstand voltage value is equal to the full wave lightning impulse withstand voltage. Kindly confirm our understanding.	Tender condition prevails.
483.	General		We understand, IP class applicable for the enclosure is not provided in given tender documents. Kindly provide required IP class for the enclosure.	Question not clear. However, applicable IP Class for the enclosure already defined in tender document.
484.	Part2: Employer's requirements/Chapter 13A: 220kV Receiving substations/Cl.No- 2.2.4/ Page No: 11 of 387	Main Features Required) Type Test Requirement:- All voltage level GIS as offered should be fully type tested as per latest IEC standards at the time of vendor approval and type test report should not be more than 5 years old at the time of LOA.	We understand that the type test certificates of the collaborator of the Indian GIS manufacturer within 15 years validity as per the guidelines of Central electricity authority of India. Kindly confirm.	Tender Conditions Prevails.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
485.	BoQ-Bill No. B2 & GIS SLD	Bill No. B2 SLD- KRDD01-TDR-GEN-GEN-TPS-DWG-00011 KRDD01-TDR-GEN-GEN-TPS-DWG-00012 KRDD01-TDR-GEN-GEN-TPS-DWG-00013 KRDD01-TDR-GEN-GEN-TPS-DWG-00014	We understand BOQ indicates that the total number of bays needed is 32. However, according to the SLD for 4 RSS the total number of bays is 31. 1. MATHIKERE - 220Kv RSS (GIS)- 8 Bay 2. YELAHANAKA - 220Kv RSS (GIS)- 8 Bay 3. BENNIGANAHALLI - 220Kv RSS (GIS)- 8 Bay 4. SOLDEVANAHALLI DEPOT RSS - 220Kv RSS (GIS)- 7 Bay Kindly clarify & provide the revised SLD.	Bidders to refer BoQ Item no. 6 of Bill no. B2. For Soladevanahalli Depot RSS, the requirement of coupling feeder shall be decided during detailed engineering stage.
486.	GTP K-RIDE/BSRP/PST/C2&C4/2024 Chapter 13B: 220kV Receiving substations (GTP) 16 220KV CABLES (AS PER KPTCL SPECIFICATION (Clause No 1.5) Conductor Screen) KPTCL Technical specification Technical Specification-1200 sq mm 220 kV XLPE UG Cables -Rev 02 CABLE MATERIAL (Clause No :6.12.0 : (b)) K RIDE Technical specification K-RIDE/BSRP/PST/C2&C4/2024 Chapter 13A: 220kV Receiving substations (Clause No ::4.2.4 ii)	Description as per GTP Conductor screen b) Thickness (mm) Min. 1.5 Description as per K RIDE Technical specification Minimum thickness of the conductor screen shall be 0.95 mm for 220 kV cables Description as per KPTCL Technical specification b) Conductor Screen: The minimum thickness, excluding tape/s shall be 1.5 mm.	FJPS Remarks - Query / Deviation We will considered minimum thickness of conductor screen is 1.5mm as per KPTCL Technical specification. Please confirm.	Bidder to Refer corrigendum no. 1, Sl. no. 76
487.	GTP K-RIDE/BSRP/PST/C2&C4/2024 Chapter 13B: 220kV Receiving substations (GTP) 16 220KV CABLES (AS PER KPTCL SPECIFICATION (Clause No :11)	Description as per GTP Insulation screen b) Thickness (mm) Min. 1.0		Bidder to Refer corrigendum no. 1, Sl. no. 76

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
	<u>KPTCL Technical specification</u> Technical Specification-1200 sq mm 220 kV XLPE UG Cables -Rev 02 CABLE MATERIAL (Clause No :6.12.0 : (b)) <u>K RIDE Technical specification</u> K-RIDE/BSRP/PST/C2&C4/2024 Chapter 13A: 220kV Receiving substations (Clause No :4.2.4 iv)	<u>Description as per K RIDE Technical specification</u> Insulation Screen Minimum thickness of Insulation screen should be 0.8 mm. <u>Description as per KPTCL Technical specification</u> b)Insulation Screen: minimum thickness 1.0 mm.	<u>FJPS Remarks - Query / Deviation</u> We will consider minimum thickness of conductor screen is 1.0mm as per KPTCL Technical specification. Please confirm.	

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
488.	GTP K-RIDE/BSRP/PST/C2&C4/2024 Chapter 13B: 220kV Receiving substations (GTP) 16 220KV CABLES (AS PER KPTCL SPECIFICATION (Clause No :12) KPTCL Technical specification Technical Specification-1200 sq mm 220 kV XLPE UG Cables -Rev 02 CABLE MATERIAL (Clause No :6.04.0) K RIDE Technical specification K-RIDE/BSRP/PST/C2&C4/2024 Chapter 13A: 220kV Receiving substations (Clause No :4.2.4 iii)	Description as per GTP Maximum value of Electric stress at Conductor screen 7.49 kV/mm At the insulation 3.60 (at insulation screen) kV/mm Description as per K RIDE Technical specification The voltage gradient in the rated working conditions shall be • Equal to or less than 6 kV/mm at the level of internal semiconductor • Equal to or less than 3 kV/mm at the level of external semiconductor Description as per KPTCL Technical specification DIELECTRIC STRESSES: a) At conductor screen 8 KV/mm b) At the insulation screen 4 kV/mm	FJPS Remarks - Query / Deviation Since this is 220kV Cable the maximum DIELECTRIC STRESSES shall be as below in line with KPTCL specification. a) At conductor screen 8 KV/mm b) At the insulation screen 4 kV/mm Please confirm.	Bidder to Refer corrigendum no. 1, Sl. no. 76
489.	GTP K-RIDE/BSRP/PST/C2&C4/2024 Chapter 13B: 220kV Receiving substations (GTP) 16 220KV CABLES (AS PER KPTCL SPECIFICATION (Clause No :13) KPTCL Technical specification Technical Specification-1200 sq mm 220 kV XLPE UG Cables -Rev 02 CABLE MATERIAL (Clause No :6.12.0 (c)) K RIDE Technical specification K-RIDE/BSRP/PST/C2&C4/2024 Chapter 13A: 220kV Receiving substations (Clause No :4.2.4 iii)	Description as per GTP Thickness of XLPE Insulation Nominal 25.0 (mm) Description as per K RIDE Technical specification Nominal thickness of insulation > 19 mm Description as per KPTCL Technical specification Insulation: The nominal thickness of 24.00 mm	FJPS Remarks - Query / Deviation We have considered Nominal insulation thickness is 24.0mm as per KPTCL Technical specification to meet the dielectric stresses as follows- a) At conductor screen 8 KV/mm b) At the insulation screen 4 kV/mm Please confirm.	Bidder to Refer corrigendum no. 1, Sl. no. 76

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
490.	GTP K-RIDE/BSRP/PST/C2&C4/2024 Chapter 13B: 220kV Receiving substations (GTP) 16 220KV CABLES (AS PER KPTCL SPECIFICATION (Clause No :18) KPTCL Technical specification Technical Specification-1200 sq mm 220 kV XLPE UG Cables -Rev 02 CABLE MATERIAL (Clause No :3.00.0 b) 8.) K RIDE Technical specification K-RIDE/BSRP/PST/C2&C4/2024 Chapter 13A: 220kV Receiving substations (Clause No :4.2.4 vi))	Description as per GTP 50 kA for 1 second (in combination with lead sheath) Description as per K RIDE Technical specification Metallic sheath shall be either of Corrugated Aluminum sheath. The metallic sheath shall be able to carry a short circuit current of 31.5 kA for 1 seconds Description as per KPTCL Technical specification Maximum fault level & its duration 50KA for 1 Sec (with lead sheath)	FJPS Remarks - Query / Deviation We will consider maximum fault level & its duration 50KA for 1 Sec (In combination with copper wire screen and lead sheath) as per KPTCL Technical specification. Please confirm.	Bidder to Refer corrigendum no. 1, Sl. no. 76
491.	Part2: Sec VII Vol-II: Technical Specification CH-2 / Clause 2.2.3 Design Verification Works- RSS, Civil Works at each RSS Pg -19/1020	Design verification and construction design, Supply and erection, testing and commissioning of the GIS type High Voltage Bays consisting of but not limited to all Switchgear, Measurement transformers, lightning arresters, busbars along with their foundations to support the various equipment / bus bars.	We understand Equipment foundation to support the various equipment / bus bars for RSS locations is in scope of PST Contract. Kindly clarify the type of Equipment foundation required i.e., PCC (Plain cement concrete) or RCC (Reinforced cement concrete) for the RSS Locations.	PST contractor shall conduct Soil test /geo technical investigation and the report of the same shall be submitted for employer/engineer approval. Based on the same, the relevant grade of RCC (Reinforced cement concrete) shall be considered.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
492.	Part2: Sec VII Vol-II: Technical Specification CH-2/Clause 2.2.3 Design Verification Works- RSS Scope -Pg 14/1020	Supply, Installation, Testing and Commissioning of gantry structures, towers and associated arrangements	We understand the at RSS locations gantry structures, towers and associated arrangements should be provided. Kindly clarify the type of foundation required for towers & Gantry Structures i.e., PCC (Plain cement concrete) or RCC (Reinforced cement concrete) for the RSS Locations.	PST contractor shall conduct Soil test /geo technical investigation and the report of the same shall be submitted for employer/engineer approval. Based on the same, the relevant grade of RCC (Reinforced cement concrete) shall be considered.
493.	Part2: Sec VII Vol-II: Technical Specification CH-2/ Clause 2.2.3 Design Verification Works- RSS, Civil Works at each RSS Pg -19/1020	Design verification and construction design, Supply and erection, testing and commissioning of the GIS type High Voltage Bays consisting of but not limited to all Switchgear, Measurement transformers, lightning arresters, busbars along with their foundations to support the various equipment / bus bars.	Kindly confirm the design life of Structures which supports the Equipment. Also, please specify the applicable terrain category for the RSS.	100 years design life of equipment structure shall be considered. Terrain category shall be as per geo technical investigation and contractor to conduct the same for applicable terrain.
494.	Part2: Sec VII Vol-II: Technical Specification CH-2/ Clause 2.2.3 Design Verification Works- RSS, Civil Works at each RSS Pg -19/1020	Design verification and construction design, Supply and erection, testing and commissioning of GIS type for Traction Transformer Bays consisting of but not limited to all Switchgear, Measurement transformers, lightning arresters, busbars along with their foundations to support the various equipments / busbars and any other component or material required to make the installation complete and operable	Kindly provide the recommended type of foundation for transformers for the RSS Locations. Please specify whether PCC (Plain cement concrete) or RCC (Reinforced cement concrete) foundation to be followed.	PST contractor shall conduct Soil test /geo technical investigation and the report of the same shall be submitted for employer/engineer approval. Based on the same, the relevant grade of RCC (Reinforced cement concrete) shall be considered.
495.	Part2: Sec VII Vol-II: Technical Specification CH-2/ Clause 2.2.3 Design Verification Works- RSS, Civil Works at each RSS Pg -19/1020	Survey, Excavation, Backfilling, Barricading, etc for the EHV Cabling work of the RSS. Trenchless/pipe laying for the EHV Cabling work of the RSS. •Landscaping • Transformer Oil sump with suitable capacity of pumping arrangement. •Baffle walls	Kindly provide the associated fire rating of the baffle wall (in terms of no. of Hours the baffle wall to be designed to withstand).	4 Hours rated baffle wall shall be considered.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
496.	Part2: Chapter 13A/ Clause 8.3 -Access Roads / Rail cum Road / RCC Road, Pg-680/1020	The approach roads should, at the minimum, be 5.0m wide and shall be able to support 100 – ton trailers.	We understand that the width of the road mentioned in clause 8.3 for approach road is also applicable for the internal roads & Rail cum road inside RSS. Please confirm & Kindly share the cross-section drawings of Road for our reference.	Tentative drawings are already provided. Bidder to assess the requirement by conducting site survey.
497.	PART 2: EMPLOYERS REQUIREMENT/Vol.II – TECHNICAL SPECIFICATION/ Cl.1.5.1 & Cl. 2.2.3 / Pg 7 of 1020 & 14 of 1020	Source of power supply: 05 Nos. Receiving Sub-stations shall be constructed under BSRP. Contractor shall be responsible for carrying out all the detailed design verification works associated with the construction of RSS cum TSS cum AMS including all electrical, civil, architectural and structural, drainage, plumbing works etc, (complete RSS work at 04 locations).	We understand that total 4 Nos. of RSS, Guard room and Store is under the scope of Works as per Clause 2.2.3 under “Chapter 2: Scope of work”. In case of any difference of opinion, Authority is requested to clarify the same.	Bidder to Refer Corrigendum No.1, Sl. no. 35
498.	PART 2: EMPLOYERS REQUIREMENT/Vol.II – TECHNICAL SPECIFICATION/ Cl. 2.2.2/Pg 12 of 1020	At Mathikere, Benniganahalli and Yelahanka it is planned to construct 2 nos. of RSS at each location. However, in the above table only one RSS pertaining to Corridor 2 and 4 is indicated for this tender only.	We understand that only One RSS building at each location is under the scope of Works. Kindly confirm our understanding.	Bidder to refer tender drawings for RSS.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
499.	PART 2: EMPLOYERS REQUIREMENT/Vol.II – TECHNICAL SPECIFICATION/Cl. 2.2.2/Pg. 12 of 1020	RSS Layout and Building GAD	Kindly provide the RSS Layout and building GAD for following location for Bidder consideration. 1.Benniganahalli 2.Yelahanaka Soldevanahalli Depot RSS	Benniganahalli and Yelahanka RSS drawings may be considered similar to Soladevanahalli RSS (tentative). However, final GFC will be issued at the time of the detailed engineering stage.
500.	PART 2: EMPLOYERS REQUIREMENT/Vol.II – TECHNICAL SPECIFICATION/ Cl. 8.3/Pg 680 of 1020	Access Roads / Rail cum Road / RCC Road	We understand that approach road for Depot is not under the scope of RSS Contractor, the approach road of RSS Mathikere, Benniganahalli & Yelahanaka is under the scope of RSS contractor. Kindly confirm our understanding & please provide the approach road length & width, location/layout of mentioned location for the Bidder Consideration.	Bidder to Refer corrigendum no. 6, Sl. no. 6
501.	PART 2: EMPLOYERS REQUIREMENT/Vol.II – TECHNICAL SPECIFICATION/Cl. 8.5.8/ Pg 685 of 1020	Storage and septic tanks shall be required due to restricted hours of water supply in the Bengaluru Area.	Please provide the capacity of the storage water tank and the septic tank for bidder's consideration. Also, requested to provide the detail reference drawing.	UG Water tank capacity of 2 KL to be considered. Septic tank details shall be finalised during detailed engineering stage.
502.	PART 2: EMPLOYERS REQUIREMENT/Vol.II – TECHNICAL SPECIFICATION/ Cl. 8.5.8/Pg 679 of 1020	Wet Land type Sewage Treatment Plant shall be provided subject to the approval of the Engineer-in-Charge.	Kindly provide the detail reference drawing of Wet Land type Sewage Treatment Plant for bidder's consideration.	STP details shall be finalised during detailed engineering stage.
503.	KRDD01-TDR-GEN-GEN-TPS-DWG-00016 / Pg 1 of 2	Mathikere Layout	Kindly provide the GAD for Store (150 sqm) inside RSS (Depot) for bidder consideration. Also, requested to clarify the type of structure to be provided for Store.	RCC type of structure shall be considered for store room. Bidder to refer tender drawing no. KRDD01-TDR-GEN-GEN-TPS-DWG-00016.
504.	Site Plan & Overall General Arrangement/Electrical Equipment Layout (Plan) - Mathikere 220/33/27.5 kV GIS	Cable Trenches	Kindly provide the tentative scope for cable trenches along with their cross-sectional details for all 4 RSS substations.	Bidder to refer tender drawing no. KRDD01-TDR-GEN-GEN-TPS-DWG-00017.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
505.	Substation [Dwg No. KRDD01-TDR-GEN-GEN-TPS-DWG-00016]	12 MTR. WIDE ROAD (TO BE CONSTRUCTED BY CONTRACTOR)	Kindly confirm if the Road Marked as "12 MTR. WIDE ROAD (TO BE CONSTRUCTED BY CONTRACTOR)" is in the scope of this tender. If yes, kindly provide the detailed scope (Length, type of road etc.) along with cross detail.	Bidder to Refer corrigendum no. 6, Sl. no. 6
506.		Fencing around Transformer in RSS area (marked in CYAN colour)	Kindly provide the detailed scope of the Fencing & Gates to be provided around the transformers along with standard ref Dwg for Fencing, Gates their uprights and foundation details.	Tentative drawings are already provided. The detailed drawings shall be prepared by the successful bidder based on soil type and actual site conditions and approval shall be taken from the Employer / Engineer.
507.		Boundary Wall at 11kV Existing Substation	Boundary wall has been marked in RED texts the dwg at existing 11kV substation side. Kindly confirm if this boundary wall is in the scope of RSS. Also kindly provide the scope of boundary wall for each RSS location.	Bidder to construct boundary wall for all RSS. Bidder to refer corrigendum - 1, S.nol. 61.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
508.	Part2: Employer's requirements Chapter 13A: 220kV Receiving substations (Page-192 of 387) CL. 8.3 Access Roads / Rail cum Road / RCC Road	The Access Road, Rail-cum-Road in the transformer area and other Approach Road to Building & Storeroom inside the RSS shall be of RCC as per BSRP specifications.	Kindly provide tentative scope of the access road, approach road to building and storeroom & rail-cum road along with dwg showing their cross-sectional details for reference.	Bidder to Refer corrigendum no. 6, Sl. no. 6. PST contractor shall conduct Soil test /geo technical investigation and the report of the same shall be submitted for employer/engineer approval. Based on the same, the road details to be worked out during detailed engineering stage.
509.	General	Scope of Civil Works	Kindly provide the tentative scope of Fencing, Drainage, Landscaping Earthwork & ground improvement (if any) for each RSS locations.	Please refer Drawing No.KRDD01-TDR-GEN-GEN-TPS-DWG-00016 for Fencing. For Drainage, Landscaping Earthwork & ground improvement for each RSS locations shall be finalized during detailed engineering stage.
510.	General	Cable Trenches	Kindly clarify the scope of UG Buried cable trenches & RCC cable trenches separately.	Cable trench for RSS is already provided in tender drawing no. KRDD01-TDR-GEN-GEN-TPS-DWG-00017. 220kV Buried cable arrangement is already provided in tender drawing no. KRDD01-TDR-GEN-GEN-TPS-DWG-00024.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
511.	Explanatory Notes for RSS (Page-30 of 33) ITEM NO.22.11: CABLE TRENCHES AND CABLE TROUGH	Louvers of RCC with covers laid with angles.	The bidder understands that the cable trenches shall be covered with Solid Precast covers, not Louvers. Hence, kindly clarify the provision and provide the details and scope for the Louvers of RCC with covers laid with angles for cable trenches. Also share ref Dwg for the same for bidder's reference.	Pre-cast cover slab shall be considered with angles provided on edges of slab for better strength and life. The provision of RCC Type Louver at few locations on cable trench, if any, will be finalized during detailed engineering stage.
512.	Explanatory Notes for RSS (Page-30 of 33) ITEM NO.22.16: YARD FENCING	The price shall include provision of yard fencing to separate from equipment energized area to man movement in the RSS as per the specifications as in chapter 8A of PS.	Kindly share the scope of Yard Fencing along with standard ref drawing for bidder's reference.	Tentative drawings are already provided, and the detailed drawings shall be prepared by the successful bidder based on soil type and actual site conditions.
513.	Part2: Employer's requirements Chapter 13A: 220kV Receiving substations (Page-191 of 387) CL. 8.2 Land Preparation	The Bidder is advised to inspect the sites for various RSS-cum-TSS-cum-AMS locations and gather for himself various details such as topography and land levels, soil condition including the safe bearing capacity, soil resistivity etc, HFL (highest flood level) at the Substation site, drainage requirements etc, in order to ensure that the work content is fully appreciated by him at the time of preparation of bid.	Provide the reports for Geotechnical investigation carried out by the authority (if available) for bidder's reference. Also provide the HFL Data, and SBC values observed in the region.	PST contractor shall conduct Soil test /geo technical investigation and the report of the same shall be submitted for employer/engineer approval.
514.	General	Ground Improvement	Kindly provide the details of Ground improvement used (if any) in this region for bidder's reference.	PST contractor shall conduct Soil test /geo technical investigation for consideration of ground improvement works and the report of the same shall be submitted for employer/engineer approval.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
515.	General	Geotech investigation for SBC calculation	Kindly provide some general instructions/guidelines regarding the type of geotechnical investigation/ no of bore log to be done (if any) for RSS locations.	PST contractor shall conduct Site survey/ Soil test/geo technical investigation as per standards norms and the report of the same shall be submitted for employer/engineer approval.
516.	DRG NO: KRDD001-TDR-CR04-GEN-OCS-SEC-00002	MAIN LINE 25KV OHE SECTIONING SCHEMATIC DIAGRAM (Sheet 3 of 14)	At Heelalige (Sub-Urban) Station and Rajankunte (Sub-Urban) Station, some of the part of stabling/loop lines are shown as Tramway type OHE. However, as per the BoQ, the Mainline section should only have conventional OHE and no quantity for Tramway type OHE has been provided. Hence, we understand only conventional OHE is to be considered for the above stabling/loop lines. Kindly confirm our understanding.	Bidder to refer corrigendum no. 6, Sl. No.8
517.	DRG NO: KRDD001-TDR-CR04-GEN-OCS-SEC-00002	MAIN LINE 25KV OHE SECTIONING SCHEMATIC DIAGRAM (Sheet 3 of 14)	In Pegging Plan given for Corridor-4, Bommasandra Station is shown as Future Station. However, in sectioning diagram of Corridor-4, Bommasandra is shown in current scope of work. There is an ambiguity between both drawings. Request you to confirm which of the drawing is to be referred.	Bommasandra station is future station and not in current scope of work.
518.	General	GAD	GAD of Depot Shed is not available in the Tender Drawings. Kindly provide the same.	Bidder to refer corrigendum-1, Sl.No. 63
519.	Part2: Employer's requirements, Chapter 14: DLP/AMC OF OHE, PSI AND SCADA	Contractor shall also ensure that CMV is maintained in good working condition all the time and to ensure that keep all spares and T&P in accordance with the List as per Table 2. Maintenance of CMV is to be done by designated contractor.	Kindly confirm whether the supply of CMV is within the scope of this contract.	Bidder to refer query no. 387 Supply of CMV is not in scope of this Tender.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
520.	Part2: Employer's requirements, Chapter 14: DLP/AMC OF OHE, PSI AND SCADA (pg. 17-20 / 50)	2.2 Table for OHE EMERGENCY MATERIAL (T&P) TO BE KEPT IN CMV & EMERGENCY ROAD VEHICLE & Item Spares	As per the referred clause, a list of spares and tools is provided under tender document which shall be kept in CMV. However, tools listed in the BoQ are not same as per the referred table. Kindly clarify and confirm the scope of Spares & Tools under this contract.	Bidder to refer corrigendum no. 6, Sl. No.10
521.	Annexure VII-6: Reference Drawings / Typical Drawings	POWER SUPPLY DRAWINGS KRDD01-TDR-GEN-GEN-TPS-DWG-00021_R0: Typical EHV Cable Route from GSS to RSS	We understand that the provided drawing number pertains to the typical EHV cable route from GSS to RSS for only 220kV Mathikere RSS (KRIDE). We kindly request you to provide the typical EHV cable route for all four RSS locations.	The tentative location of GSS and RSS are shown in clause 1.2 chapter 13A, Part 2: Employer requirements which are indicative only. However, as per BoQ item no. 3.1.1, Detail Route Survey of complete Route Length is in the scope of PST contractor
522.	Annexure VII-6: Reference Drawings / Typical Drawings	POWER SUPPLY DRAWINGS KRDD01-TDR-GEN-GEN-TPS-DWG-00021_R0: Typical EHV Cable Route from GSS to RSS	We understand that the provided drawing number pertains to the typical EHV cable route from GSS to RSS. The drawing is referenced as R0 in the clause, but the available tender drawing is KRDD01-TDR-GEN-GEN-TPS-DWG-00021. Kindly provide the revised document KRDD01-TDR-GEN-GEN-TPS-DWG-00021_R0.	Tender condition prevails.
523.	BoQ item 1.7	Supply of pilot wire cable/FO Cable armoured indoor /outdoor for communication (FO cable-48 core,9 fibre or as per approved GTP from Kride)	We understand that the pilot wire cable/FO cable (armoured, indoor/outdoor) for communication will be provided by the PST Contractor. However, the detailed specifications and GTP for the FO cable with 48 cores and 9 fibers are not included in the tender document. Kindly provide the GTP and specifications for the FO cable with 48 cores and 9 fibers.	Bidder to refer corrigendum no. 6, Sl. No.12

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
524.	Part 2: Employer's requirements, Chapter 11A Auxiliary Substations Section 16	VIADUCT LIGHTING ALONG THE VIADUCT (FOR ELEVATED SECTION)	We understand viaduct lighting is in the scope of PST Contractor. Request you to kindly provide the details of scope to be covered under this tender along with relevant drawings.	Bidder to refer Part2: Employer's requirements Chapter 11A: Auxiliary Substations clause 16.
525.	Part 2: Employer's requirements, Chapter 11A Auxiliary Substations Section 16	VIADUCT LIGHTING ALONG THE VIADUCT (FOR ELEVATED SECTION)	We understand viaduct lighting is in the scope of PST Contractor. Kindly provide details on the mounting arrangement for lighting.	Bidder to refer Part2: Employer's requirements Chapter 11A: Auxiliary Substations clause 16.
526.	Part 2: Employer's requirements, Chapter 11A Auxiliary Substations/Section 16 DRG NO: KRDD01-TDR-GEN-GEN-TPS-DWG-00026	NETWORK DETAILS	As per overall 33KV Power Supply single line diagram, the ASS at Lotegollahalli is included in scope of contractor but not mentioned in Chapter 11A. Kindly confirm if Lotegollahalli ASS is within the scope of PST contractor.	Bidder to refer corrigendum-1, Sl.No. 58
527.	Part 2: Employer's requirements, Chapter 11A Auxiliary Substations Section 16 DRG NO: KRDD01-TDR-GEN-GEN-TPS-DWG-00026	NETWORK DETAILS	As per overall 33KV Power Supply single line diagram, 630KVA 33kV/415V Auxiliary Transformer is to be provided at Mathikere Station and 500 KVA 33kV/415V Auxiliary Transformer is to be provided at Yeshwantpur Station. However, in chapter 11A, 500 KVA Transformer is to be provided at Mathikere and 630 kVA is to be provide at Yeshwantpur ASS.Both requirements are contradictory to each other.Kindly confirm the KVA ratings of transformers at Yeshwantpur & Mathikere stations.	Bidder to refer corrigendum-1, Sl.No. 58
528.	Part2: Employer's requirements Chapter 13A: 220kV Receiving substaions / CHAPTER-13A-220kV RECEIVING SUBSTATIONS, Cl. 2.2.4. 30, Page no. 14 & 2-Explanatory note RSS BOQ ITEM 6.2	CHAPTER-13A- 220kV RECEIVING SUBSTATIONS 30) There should also be provision of manual PT disconnection handle (outside GIS) for PT isolation & Voltage Transformer with integrated isolation devices suitable for high voltage DC testing of cables.	We understand that according to BoQ, Voltage Transformer with integrated isolation devices to be provided. As per Chapter-13A, manual PT disconnection handle for PT isolation shall be provided. Kindly confirm shall we provide manual or integrated isolation for PT.	The clause is self explanatory. Bidder to provide Integrated isolation for PT with provision of manual disconnection.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
529.	2-Explanatory note RSS BOQ ITEM 6.2 and 6.3 & SLD - KRDD01-TDR-GEN-GEN-TPS-DWG-00011_R1	ITEM 6.2: 220KV TRACTION TRANSFORMER FEEDING BAY Indoor lightning arrester – 1 set ITEM 6.3: 220KV AUXILIARY TRANSFORMER FEEDING BAY Indoor lightning arrester – 1 set	As per BoQ, we understand that indoor LA shall be provided in 220kV GIS. According to tender SLD - KRDD01-TDR-GEN-GEN-TPS-DWG-00011_R1, LA is not given in GIS as it is shown after Cable Termination (CSE). Kindly clarify whether the LA is to be included in GIS or not.	LA will be included in GIS only.
530.	2-Explanatory note RSS BOQ & SLD: KRDD01-TDR-GEN-GEN-TPS-DWG-00011_R1	BoQ ITEM 6.1 : Line Earth Switch (Fast acting) – 1 No	As per BoQ item 6.1 of 2-Explanatory note RSS BOQ, we understand that only one Line Earth Switch is required. However, Separate ES is shown in mentioned tender SLD for each DS. Kindly confirm the exact quantity of required ES.	Bidder to refer SLD as per tender drawings
531.	KRDD01-TDR-GEN-GEN-TPS-DWG-00011_R1 / KRDD01-TDR-GEN-GEN-TPS-DWG-00012_R1 / KRDD01-TDR-GEN-GEN-TPS-DWG-00013_R1/ KRDD01-TDR-GEN-GEN-TPS-DWG-00014_R1	DS and ES - a three-position switch.	We understand that the DS and ES are two separate modules and not the three position switches. Kindly clarify. We understand that the Maintenance ES shall be placed after CB and before CT. Kindly confirm.	Bidder to refer SLD as per tender drawings
532.	Part2: Employer's requirements/ Chapter 13A: 220kV Receiving substations/ 2.2.4 Main Features Required / Page No. 11 of 387	11) The Disconnectors and Earthing Switches shall be electrically and mechanically interlocked against mal-operation. Feeder earthing switch shall be fast acting type with making capacity and isolated from earthed enclosures and shall permit testing of switchgear.	We understand that the DS and ES are two separate modules, and only electrical interlock shall be provided. Additionally, for mechanical locking we shall provide the separate drives which are having padlocking facility. Kindly confirm our understanding.	Functional requirement as per tender condition to be met. However, details will be finalized during the detailed engineering stage.
533.	2 Part2: Employer's requirements/ Chapter 13A: 220kV Receiving substations/ 2.6.1 Auxiliary Main Transformer/ Page No. 29 of 387	Xii) Windings - Current density for each winding shall be not more than 2.5 A/mm2."	We understand as per specification Current density for each winding shall be not more than 2.5 A/mm2. Kindly confirm does it required at ONAN base or ONAF base?	Tender condition prevails.
534.	Part2: Employer's requirements / Chapter 13B: 220kV Receiving substations (GTP)	1.1 220kV/27.5kV Traction Transformer: Efficiency (not accounting for the power drawn by the secondary) - 4/4 of secondary load is 99.6 (min) & 2.1 220kV/33kV Auxiliary Main Transformer: Efficiency (not accounting for the power drawn by the secondary) (ONAN) is 99.6 (min)	We understand that efficiency is 99.6% (min.). We request you to kindly specify power factor. Also, kindly clarify whether the load losses shall be evaluated based on losses on ONAN rating or ONAF rating.	Bidder to refer corrigendum-1, Sl.No. 36 & 37.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
535.	Part2: Employer's requirements/ Chapter 13A: 220kV Receiving substaions/ 2.6.1 Auxiliary Main Page No.28, 29 of 387	Short-Circuit Withstand: At rated power and frequency on the main tapping, the impedance voltage shall be equal to about twelve-point five percent (12.5%) inclusive of tolerance.	We understand that at rated power & frequency on the main tapping, the impedance voltage shall be equal to 12.5%. Kindly provide the base MVA and tolerance for impedance requirements of 12.5%.	Tender condition shall prevails.
536.	Part2: Employer's requirements/ Chapter 13A: 220kV Receiving substaions /2.7.2 Traction Transformer /i) SCOPE	55°C above ambient temperature for the copper winding and the iron core.	Kindly provide the Iron core temperature rise. Kindly confirm if it shall be as per IEC standards.	Tender condition shall prevails.
537.	Part2: Employer's requirements / Chapter 13A: 220kV Receiving substaions /2.6.1 Auxiliary Main Transformer/ Page No.25 of 387	vi) Overload Capacity: Overloading for transformer	We understand Interval of time between two successive overloads is not available in given specification. Kindly confirm the same.	Over loading Condition shall be as per relevant IEC standards. Bidder to Refer clause 2.6.1 (ii) of Part2: Employer's requirements Chapter 13A: 220kV Receiving substaions.
538.	Part2: Employer's requirements Chapter 13B: 220kV Receiving substaions (GTP)	Rated lightning impulse withstand voltage for primary neutral : 650 kV Peak	We understand that the rated lightning impulse withstand voltage for primary neutral of 650kV Peak is for 132kV, which is not required for 220 kV OLTC. Kindly confirm our understanding.	Tender condition shall prevails. Bidder to consider rated lighting impulse voltage for 220kV as per relevant IEC standards.
539.	Part2: Employer's requirements/ Chapter 13A: 220kV Receiving substaions /2.7.2 Traction Transformer /i) SCOPE	These specifications are applicable to Traction Transformer of 2-phase 220/132/66 kV primary voltage and 1-phase, 27.5 kV secondary voltages. Traction Transformer shall be designed for outdoor installation and for operation at frequencies of 50 Hz.	According to referred clause " These specifications are applicable to Traction Transformer of 2-phase 220/132/66 kV primary voltage and 1-phase, 27.5 kV secondary voltages." We understand that 220 kV Traction Transformer is 1 Phase & not a 2 Phase. Kindly confirm.	Bidder to refer Clause 2.7.2 (iii) of Chapter 13A, 220kV Receiving substations for understanding of transformer configuration.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
540.	General		We understand that system fault level and duration for 33kV & 27.5 kV is not provided. Kindly provide system fault level and duration or advise to consider it as per IEC?	Bidder to refer clause 2.1 of Part2: Employer's requirements Section VII Vol-II: Technical Specification Chapter 11B: Auxiliary Substations (GTP) for 33kV system and Clause 1.1 of Part2: Employer's requirements Chapter 9B: Traction Network- Technical sheets for 25kV system
541.	Annexures VII-8, Part-2	Annexure VII-8 : GTI Report	The GTI report in the stated annexure in the Part-2 of Tender doc is marked as 'DELETED'. Kindly provide the available GTI reports for all RSS locations.	GTI shall be conducted by PST contractor for all 4 RSS locations.
542.	Part2: Employer's requirements/Chapter 13A: 220kV Receiving substations	8.5.21 Chain link fencing "Switch yard shall be protected with 1.5-meter height GI chain link fencing, fencing shall be done as per latest RDSO/CPWD specifications."	We understand that 1.5-meter height GI chain link fencing shall be provided at switch yard. We request you to provide the detailed scope and location where the proposed 1.5m high chain link fencing is to be provided. Also, kindly share the standard ref drawing for this chain link fencing & its foundation for bidder's reference.	Fencing shall be provided as per site conditions.
543.	General	Ground Improvement	Kindly share the details of existing soil/ ground conditions and methodology adopted for the ground improvement (if any) adopted in vicinity the RSS areas for K-Ride works.	PST contractor shall conduct the soil investigation study and provide for ground improvement works (if any).
544.	Part2: Employer's requirements/ Chapter 9B: Traction Network-Technical Sheets	25 kV Cables	For 26/45 KV 1C X 400 Sq.mm AL Cable, kindly confirm whether Copper & Aluminium screening is to be provided.	Metalic screen shall be of aluminum for aluminuim conductor and copper screen for copper conductor.

Sl. No	Clause Reference	Clause description	Bidders query, Request for additional information, modifications and considerations	KRIDE response/reply
545.	Part2: Employer's requirements Chapter 9B: Traction Network-Technical Sheets	25 kV Cables	For 25 KV Cables, fault current capacity is mentioned as 14 kA for 3 second in GTP provided, however technical specification mentions metallic screen fault current capacity as 16 kA for 3 sec. Both requirements are contradictory to each other. Kindly confirm fault current capacity of 25KV Cables.	Bidder to refer corrigendum-1, Sl.No. 51
546.	Part 2: Employer's requirements, Chapter 11A Auxiliary Substations Clause 1.3.2	Short Circuit Rating The metallic screen of 33 kV cables (3 Single core cables) shall have a short circuit current carrying capacity of 1 kA for 3 sec. However, 3 phase short circuit capacity of the 33 kV cable shall be minimum 8 kA for 3 sec.	In GTP, for 33 KV 120 Sq.mm. Aluminium conductor short circuit capacity shall be 8 KA for 3 sec (Min.). However, it can withstand 11.28 KA for 1 Sec or 6.51 KA for 3 sec. The given short circuit capacity is not suitable for 33 KV 120 Sq.mm. Aluminium conductor. Kindly clarify.	Bidder to refer corrigendum no. 6, Sl. No.11