

94	SECTION – VI, PART-A	SUB-SECTION-IIC CONTROL & INSTRUMENTATION SYSTEM	7 OF 20	2.02.00	For CHP DDCMIS, necessary signal exchange with Employer's existing stage-I CHP DDCMIS system shall also be in Contractor's scope. For this signal exchange, the number of I/Os shall be considered as DI: 32 DO: 16 AI:8 AO:8. The exact scheme shall be finalized during detail engineering. Employer's stage-I CHP DCS/RIO panel shall be the terminal point	Kindly provide the distance between existing Stage-I/ II CHP DDCMIS/RIO panel from the upcoming CHP DDCMIS.	In this regard, Bidder to refer GLP.
95	SECTION – VI, PART-A	SUB-SECTION-IIC CONTROL & INSTRUMENTATION SYSTEM	9 OF 20	2.04.05	Wireless Link: For the following system identified below, Bidder shall consider wireless link:	Customer is requested to provide approximate distance between the locations between which wireless connectivity is to be considered.	In this regard, Bidder to refer GLP. Further details required if any shall be provided during detail engg.
96	SECTION – VI, PART-A	SUB-SECTION-IIC CONTROL & INSTRUMENTATION SYSTEM	9 OF 20	2.04.04	A redundant station-wide LAN for connecting the unit and other sub systems of DDCMIS, PLCs (as applicable), PC stations etc. as well for connecting to the other off-line services of the Station & connecting to IT LAN. This shall include all cables and accessories required for connecting Contractor's system upto the Employer's systems such as ERP, etc.	Kindly provide the details (purpose, mode of connectivity and distances) regarding employer's system to be connected to the plant station LAN.	Same shall be furnished during detail engg.
97	SECTION – VI, PART-A	SUB-SECTION-IIC CONTROL & INSTRUMENTATION SYSTEM	12 OF 20	2.06.00	Contractor to provide 5 nos. Fine pitch LED display (1 for Employer's Admin building gate, 1 for Employer's Main plant gate & 3 for locations to be finalized during detail engineering) for outdoor application and 5 nos. Indoor LED television (locations to be finalized during detail engineering).	Customer is requested to provide the size of Fine pitch LED display for outdoor/indoor application.	Size of Fine pitch LED display can be derived from the resolution and selected pixel pitch.
98	SECTION – VI, PART-A	SUB-SECTION-IIC CONTROL & INSTRUMENTATION SYSTEM	12 OF 20	2.05.01	The master clock shall synchronize DDCMIS of all the units and stand-alone common system and other DDCMIS subsystems at suitable intervals to maintain uniform time throughout the power station. The clock system shall be date insensitive.	Request NTPC to exclude time synchronization for employers distant plant DDCMIS from bidder scope.	Specification requirement is clear. Bidder shall comply to technical specification.
99	SECTION – VI, PART-A	SUB-SECTION-IIC CONTROL & INSTRUMENTATION SYSTEM	18 of 20	13.02.00	Common IP based network for IP based PA system and IP based CCTV system involving common components viz. network switches, network media and power supplies may be acceptable subject to employer's approval during detail engineering.	Bidder proposes that CCTV and PA system shall be in different independent network as there are limited common vendors for both the system. NTPC to provide the clarity on the requirement of Common IP based network and confirm the same during tender stage only, as the same is having considerable impact in Price and Scope.	Specification requirement is clear. Bidder shall comply to technical specification.
100	SECTION – VI, PART-B	ANNEXURE IIIC-02D	3 of 4	6.00.00	Merit order rating calculation for this package shall be provided by the contractor.	As PADO is in Customer's scope same should be taken care in PADO, and hence may please be removed from Contractor's scope <i>* Merit order Rating is not applicable in single unit configuration.</i>	PADO is not envisaged in the scope of subject package. Bidder's understanding is correct.
101	SECTION – VI, PART-B	SUB-SECTION - IIIC-02 DDCMIS ANNEXURE IIIC-02F	3 OF 5	1.05.00	Fieldbus Junction boxes made of SS 316 and specially designed for fieldbus application...These Filedbus JB's shall have suitable cover and gasket and shall have protection class of IP-66 or better..	Fieldbus Junction boxes made of SS 316 and specially designed for fieldbus application...These Filedbus JB's shall have suitable cover and gasket and shall have protection class of IP-66 or better.. Sheet Steel JB's with IP65 protection is widely prevalent in use for Profibus. Kindly accept. Cabinet in place of JB's can be used in places where there is wide concentration of signals. NTPC is requested to accept and mention the material and IP clause applicable for Cabinet.	Bidders proposal is not acceptable. Bidder to comply specification requirements of fieldbus JB's. Further requirement of cabinet in place of JB may be decided during detail engineering.
102	SECTION – VI, PART-A	SUB-SECTION-IIC CONTROL & INSTRUMENTATION SYSTEM	9 OF 10	2.04.04	This shall include all cables and accessories required for connecting Contractor's system upto the Employer's systems such as ERP, etc.	Kindly provide the details (purpose, mode of connectivity and distances) regarding employer's system to be connected to the plant station LAN.	Same shall be furnished during detail engg.
103	SECTION – VI, PART-A	SUB-SECTION-IIC CONTROL & INSTRUMENTATION SYSTEM	15 OF 20	4.00.00, Notes Pt sl no. 4	All necessary hardware and software required at instrument end shall be provided by the Contractor.	Kindly provide the details (purpose, mode of connectivity and distances) regarding employer's system to be connected	Same shall be furnished during detail engg.
104	SECTION-VI PART-A	SUB-SECTION-III TERMINAL POINTS & EXCLUSIONS AND OWNER'S INPUT	2 OF 3	3.01.00	TBs of employer's instruments and Local Junction boxes for signals which are being interfaced with the Contractor's control system. All required cables from these TBs to contractors control system shall be supplied, laid and terminated by the Contractor	Kindly provide the details regarding employer's system with terminal details.	Bidder to refer Appendix-I, Annexure-C to IIC, Part-A for details of Make up water system and AWRS system. Further termination details shall be furnished during detail engg.

105	SECTION-VI PART-A	SUB-SECTION-III TERMINAL POINTS & EXCLUSIONS AND OWNER'S INPUT	2 OF 3	3.01.02	For Employer's Fieldbus (FF/Profibus) based Devices:-- a. TBs of Fieldbus positioners and instruments. b. TBs of Fieldbus based non-intrusive actuators for fieldbus cable. All required cables from these TBs to contractors control system shall be supplied, laid and terminated by the Contractor.	Kindly provide the details regarding employer's system with terminal details.	Same shall be furnished during detail engg.
106	SECTION-VI PART-A	E-60 Indicative Vendor List LIST OF ITEMS REQUIRING QUALITY PLAN AND SUB SUPPLIER APPROVAL	7 of 25	10	Approved List of Vendor for DDCMIS (refer next subsheet named "VENDOR APPROVAL") Bidder is approved for Max DNA System	Bidder make Valmet DNA based DCS System is offered SG,TG, Station C&I, Vibration monitoring System and most of the BoP /Offsite packages for this project. NTPC is requested to approve Bidder for ValmetDNA based DCS system also. Reference List for Vamet DCS is enclosed for ready reference.	Vendor approval is project specific. However bidder proposal shall be discussed and finalised during detail engineering based on relevant supporting documents
107	SECTION-VI PART-A	SUB-SECTION-VI CHAPTER-02	2 OF 30	7	Main oil pump complete assy (Turbine shaft Driven). (If turbine driven MOP is not there then no requirement).	Turbine Shaft driven MOP is Not Applicable. NTPC to record.	Requirement of Technical Specification is clear. Bidder to comply with the provisions of Technical Specification.
108	SECTION-VI PART-A	SUB-SECTION-VI CHAPTER-02	6 OF 30	34	Electro-hydraulic convertor assembly of Main turbine Governing system	Electro-hydraulic convertor (EHC) is Not applicable due to high pressure Governing system. Equivalent item "Servo Valve" of HP/IP/Overload Control Valves Actuator (one no. each) shall be offered.	Requirements of Technical Specification is clear. Bidder to refer General Note no. 3/ Pg. no. 29 of 30 of SUB-SECTION-VI/CHAPTER-02/STEAM TURBINE GENERATOR
109	SECTION-VI PART-A	SUB-SECTION-VI CHAPTER-02	25 OF 30	4.00.00-A-6	Fittings for HPBP, High Pressure LPBP etc.	NTPC may pl. inform the items are to be offered against Fittings for High Pressure LPBP system.	Bidder to refer Amendment C-02 in this regard
110	SECTION-VI PART-A	SUB-SECTION-VI CHAPTER-02	27 OF 30	7.00.00-3	Solenoid valves (if applicable)	Solenoid valves are already covered against clause no 4.00.00-F-(i) at page no. 27 of 30 under same group C&I mandatory spares. Therefore, Solenoid valves against clause no.7.00.00-3 are not being offered. NTPC to accept.	Bidder's understanding is not correct. Bidder to comply to the specification requirement.
111	SECTION-VI PART-A	SUB-SECTION-VI CHAPTER-02	27 OF 30	7.00.00-7	Proportional valve , hydraulic solenoids , Pilot valves, Proportional valves, Position feedback trasnmitters (if applicable)	Solenoid valves are already covered against clause no 4.00.00-F-(i) at page no. 27 of 30 under same group C&I mandatory spares. Therefore, Solenoid valves against clause no.7.00.00-3 are not being offered. NTPC to accept.	Bidder's understanding is not correct. Bidder to comply to the specification requirement.
112	SECTION-VI PART-A	SUB-SECTION-VI CHAPTER-02 STEAM TURBINE GENERATOR	20 PDF page- 24	19.2-g	Temperature and Pressure switches	As per design, No Temperature and Pressure switches used in gas system. Hence will not be offered again. NTPC to record.	Bidder to supply the item as specified, based on the bidder's offered type/design, which shall be discussed during detail engineering. Further Bidder to please also refer provisions specified in Mandatory spare chapter sub-section-VI, Part-A/section-VI.
113	VI/A	I-A	1 of 44	Provenness	For the purpose of qualification of Bidders / Sub-vendor(s), experience shall be reckoned as on the LoA date of EPC package unless otherwise specified in the respective clauses.	Experience shall be reckoned from respective equipments tender enquiry date of bidder. Or six months from LOA date.	Bidder proposal is not acceptable. Bidder to comply specification requirement.
114	VI/A	I-A	20 of 44	4.22.3 (provenness)	****with an ACC designer who should have previously designed, engineered, supervised erection and supervised commissioning of at least one SRC (Single Row Condenser) type ACC of 200MW or above Steam Turbine Generator unit which is in successful operation in at least one (1) plant for a period not G17less than one (1) year.7:7	in case, bidder has conducted erection and commisioning of package, ACC designer supervision experience of erection annd commisioning is not required.	Bidder proposal is not acceptable. Bidder to comply specification requirement.

115	VI/A	I-A	3 of 9	2.02.11	** vibration monitoring system...	As per standard practice, vibration monitoring system is not required for ACC. Vibration transmitters may be provided for fan vibrations.	Bidder's proposal is not acceptable. Bidder to comply technical specification requirement.
116	VI/B	G-03	13 of 16	Layout philosophy	Equipment operating & maintenance platforms including supporting structures such as grating platform in the oil equipment room, control fluid equipment room, valve room, De-aerator, Gland Steam Condenser-----	GSC is installed at floor level. So no maintenance platform required.	Requirements of Technical Specification is clear. Bidder to comply specification requirement.
117	VI/B	A-07	8 of 28	2.01.01 (j)	Condensate collection tank material shall be as per ASTM-A-285 Gr.C or equivalent--	Condensate tank drain tank material shall be IS2062 E250BR or equivalent. NTPC is requested to allow for Indian standards.	This is a part of the detailed engineering stage and shall be decided during that stage in case of award. Bidder to comply with the requirements of Technical Specifications.
118	VI/B	A-07	9 of 28	2.01.01 (o-Xv)	Further, the Air-Cooled Condensers shall be interconnected with each other by providing suitable platform and structure.	there is single ACC unit. So clause not applicable	Bidders understanding is correct.
119	VI/B	A-24	1 of 6	1.01.03 (ii)	ii. ACC Goods cum Passenger Elevator – 3000 kgs or, 1.25 times of weight of heaviest ACC component whichever is higher.	Electric hoist is already envisaged for maintenance purpose. NTPC is requested to clarify for what purpose it is required.	Passenger cum goods elevator is required for carrying equipment/component of ACC using Elevator in addition to the envisaged Electric Hoist. Bidder to comply with the requirements of Technical Specification.
120	VI/B	E-8	14 of 26	1.03.02 E	All piping joint shall be tested for 10% RT/UT. IBR code regulations 1950 shall be ensured for IBR piping and relevant original IBR certificates shall be furnished.	since complete ACC piping is under low pressure. IBR certificates not applicable.	Bidder understanding is not correct as Detailed test requirement is discussed & finalised during detail engg. Bidder to meet specification requirements.
121	VI/B	A-13	1 of 9	1.00.0	Thermal insulation shall also be provided for piping systems where it is expected that occasional rise in fluid temperature during operation exceeds 60 deg.C,	Temperature rise may be higher in ACC Ducts however same shall not be considered as large uninsulated ducts helps in condensation of steam which provides extra margin in heat transfer area. For personal protection, barricading may be provided with chains and signs.	Bidder's clarification is noted.
122	VI/B	G-03	14 of 16	61	in case bidder opts to keep transformers in transformer yard below ACC, bidder shall provide suitable protection as per his proven practice to safeguard the transformers and its components (bushings etc.) against damage due to foreign materials falling from ACC during O&M stage.	Fan Guard shall be provided to avoid falling of any component or foreign material to protect transformer bushings. No any other arrangement shall be provided as the same will effect the airflow to ACC fans.	Bidder's clarification is noted. However, bidder to provide provisions to avoid falling of any component or foreign material to protect transformer bushings during Erection and O&M stage.
123	VI/B	A-07	11 of 28	2.05.00	...vibration levels shall be Zone A of ISO 10816.	Applicable standard for Vibration for Vacuum pump shall be ISO-10816-1. Vibration shall be as per ISO-10816-1 Zone A/B. ISO 10816-3 is not applicable for LRPV.	ISO-10816-3 is also applicable for Vacuum pumps. Bidder to comply with the requirements of Technical Specification.
124	VI/B	G-05	8 of 37	2.02.01	Applicable Codes and Standard: ASTM ISO 10816-3 (VIBRATION)	LPH-1 & 2 shall be in the neck of condenser. Requirement of drawing & datasheet for shell side/tube side relief valves for LP Heater-2 is also not applicable.	Master Drawing List (MDL) provided in the Specification is Tentative. MDL shall be finalized after the award of the package.
125	VI/B	G-07	3 of 84	S.No. 119	DRAWINGS AND DATASHEET OF SHELL SIDE/ TUBE SIDE RELIEF VALVES OF DRAIN COOLER AND LP HEATERS (2,3, 4 & 5)	standard tubes which have already been used in earlier projects which are under successful operations shall be used. So there is no need of the type test of tube bundles. NTPC is requested to reconsider the requirement.	Bidder to refer Amendment TG-04A in this regard
126	VI/B	A-07	11 of 28	2.02.00 (L)	Type test for performance (Heat transfer coefficient) of tube bundles using scaled down model or full size model of type offered for this project shall be conducted which shall be witnessed by Employer. Procedure shall be submitted by Bidder for Employers approval.	Since there are limited suppliers in 765kV Class EHV equipments. It is requested to amend the Provenness requirement as:- The Bidder / Sub-vendor, who have established manufacturing facilities in India and three phase circuit breaker must have been manufactured in the Indian works & successfully type tested as per the relevant standard are acceptable	The provenness Criteria is clearly indicated on mentioned requirement. Bidder refer to clause no: 5.14.2(A) .I. b
127	VI-A	I-A	35 of 44	5.14.2 (A)	(I) 765kV Circuit Breakers: a) The Bidder / Sub-vendor should have Manufactured and supplied minimum five(5) nos. of three phase circuit breakers suitable for Air Insulated Substation/ Switchyard of 715 kV or above class which should have been in successful operation for minimum two(2) years.		

128	VI-A	I-A	35 of 44	5.14.2 (A)	II. 765kV INSTRUMENT TRANSFORMERS (Current Transformers / Capacitor Voltage Transformers as Applicable): a) The Bidder / Sub-vendor should have Manufactured and supplied minimum fifteen(15) nos. of single phase Instrument Transformers suitable for Air Insulated Substation/ Switchyard of 715kV or above class which should have been in successful operation for minimum two (2) years .	Since there are limited suppliers in 765kV Class EHV equipments. It is requested to amend the Provenness requirement as:- The Bidder / Sub-vendor should have Manufactured and type tested single phase Instrument Transformers suitable for Air Insulated Substation/ Switchyard of 715kV or above class prior to the supply of equipment to the project.	The proveness Criteria is clearly indicated on mentioned requirement . Bidder refer to caluse no: 5.14.2(A) .II. b
129	VI-A	I-A	36 of 44	5.14.2 (A)	III. 765 kV DISCONNECTORS : (a) The Bidder / Sub-vendor should have Manufactured and supplied minimum five(05) nos. of three phase Disconnectors suitable for Air Insulated Substation/Switchyard of 715kV or above class which should have been in successful operation for minimum two (2) years	Since there are limited suppliers in 765kV Class EHV equipments. It is requested to amend the Provenness requirement as:- The Bidder / Sub-vendor, who have established manufacturing facilities in India and 3 Phase disconnector must have been manufactured in the Indian works & successfully type tested as per the relevant standard are acceptable	The proveness Criteria is clearly indicated on mentioned requirement . Bidder refer to caluse no: 5.14.2(A) .III. b
130	VI-A	I-A	36 of 44	5.14.2 (A)	IV. 765kV SURGE ARRESTER: a) The Bidder / Sub-vendor should have Manufactured and supplied minimum fifteen(15) nos. of single phase Surge Arresters suitable for Air Insulated Substation/ Switchyard of 715kV or above class which should have been in successful operation for a minimum period of two (2) years.	Since there are limited suppliers in 765kV Class EHV equipments. It is requested to amend the Provenness requirement as:- The Bidder / Sub-vendor, who have established manufacturing facilities in India and Surge Arrestor must have been manufactured in the Indian works & successfully type tested as per the relevant standard are acceptable	The proveness Criteria is clearly indicated on mentioned requirement . Bidder refer to caluse no: 5.14.2(A) .IV. b
131	VI-A	IIB	8 of 17	1.16.00 ii)	The scope also include modification as required in existing switchyards of 765kV,132kV for addition of bays for stage-II (1X800MW) requirement, any modification / augmentation in existing control room to accommodate the control & protection panels etc of stage-II requirement	1) Bidder understand the existing switchyard is having de-centralised Bus Bar arrangement with Control & protection panels placed in bay AC Kiosk. Please confirm. 2) Bidder understand control & protection panel for the current scope of 01 number 765kV GT bay and 02 Numbers 132kV ST bay will be placed in the switchyard control room building. Please confirm sufficient space is available to accomodate the panels in the switchyard control room building. If sufficient space not available, the panels will be placed in the Bay Kiosk	1. Bidder understanding is correct.
	VI-B	B-13	15 of 45	09.00.00 iv)	All the Bay Control Units and Bay Protection Units at Plant end shall be installed in the AC kiosks in SWITCHYARD.		2. Specification requirement is clear.Bidder to comply technical specification.
132	VI-A	IIB	9 of 17	1.16.04 ii) I)	Dismantling of existing Roads , fencing if required , Foundations, Re-routing of Pipe lines above the ground & below the ground available in the present scope of Bays is also in the scope of Bidder.	Please provide the size of the pipe lines along with tentative length below and above ground withing the switchyard fence which is to be re-routed.	Bidder to re-route the facilities based on the layout developed by the bidder during detail engineering
133				Drg No. 9551-999-POE-J-001	765/132kV Switchyard Single Line Diagram	Bidder understand the following:- 1) For 132kV Bays, bus extention is required only for 01 number bay, for Bay #5, Bus conductoring is already available. Please confirm. 2) For 132kV Bus extention, the existing road to be re-routed to accommodate the new ST#3B Bay. Please confirm. 3) Bidder understand any store/offices which are located within the proposed 765kV and 132kV switchyard extention area to be dismantled. Please confirm. Please provide the following drawings:- 1) Existing Cable trench Layout 2) Existing EHV Equipment Structure Drawings 3) Existing Switchyard Tower and Beam Drawings 4) Existing Earthmat Layout Drawing or existing earthmat spacing 5) Existing Switchyard Layout & Section drawings	1. Bidder understanding is correct.
134				Drg No. 9551-999-POC-F-001 Rev B	General Layout Plan		
135	VI-B	B-06	12 of 19	3.03.00	All ACDBs, DCDBs and Solenoid Valve DBs shall be of fixed module type		

136	VI-A	IIB	9 of 17	1.16.04 ii) s)	The Bidder shall provide ACDB & DCDB Boards for further distribution of 415V AC supply, 220V DC supply for the requirement of Present scope of Bays and these Boards shall be placed in Existing Darlipali Stage-I SWYD panel room.	1) Bidder understand that the ACDB & DCDB extention boards for the switchyard scope shall be of fixed module type. Please confirm. 2) Bidder understand that the ACDB & DCDB feeder extention boards will cater only to the Auxiliary power requirements of the 01 no. 765kV GT Bay & 02 No 132kV ST bays. Please confirm. 3) Bidder understand integration of the mentioned LT extention boards with existing SAS system is not envisaged. Please confirm.	1. Bidder understanding is correct. 2. Bidder understanding is correct. 3. Bidder understanding is correct.
	VI-B	B-13	15 of 45	9.00.00 ii)	Dedicated Bay Control units and bay Protection units shall be provided for each bay in the contractor's scope of work. Also, one number BCU shall be provided for the control of SWYD service LT Switchgear (if applicable).		
137	VI-A	IIB	15 & 16 of 17	1.21.00 Table I	Type test	The type test validity is as per the latest CEA guidelines, please confirm.	CEA Guidelines for Type test validity shall be applicable for all switchyard equipments.
138	VI-C	GTR	16 & 17 of 119	8.03.04a(iv)	The complete 3D data (editable model) which shall be utilised for all future detailed engineering related to maintenance, operation, R&M, efficiency improvement of the project etc. Complete 3D model along with as built GADs, layout, isometrics, reports extracted and 3D models for all disciplines, with any other document generated from 3D model and naming conventions with as-built updates along with complete reference databases, component catalogues for all the size range shall be handed over to owner.	Bidder understand since the scope of switchyard pertains to 01 no. 765kV and 02 nos 132kV extention bays only, 3D model will not be applicable for the switchyard scope. Bidder will submit autocad drawings of the extention bays. Please confirm.	Confirmed
139	VI-B	B-17	48 of 98	11.00.00	765KV TRANSMISSION LINES	1) Bidder understand interconnection between 765kV GT#3 and the 765kV GT bay is through gantry structure. 765kV Transmission line is not envisaged, please confirm. 2) If interconnection between 765kV GT#3 and the 765kV GT bay is through transmission line please provide route survey report. 2) Bidder understand store/offices which are located along the path of the interconnection between 765kV GT#3 and the 765kV GT bay are to be dismantled. Please confirm.	1. GT 3 interconnection with 765 kV GT bay shall be routed by bidder through Gantry / Tower as per site suitability. 2. Both options (Gantry/ Tower) are provided to bidder as per site suitability. Any requirement for successful commissioning of the system shall be complied by the bidder. 3. Any facilities (Shed, road etc.) may be dismantled / rerouted if required.
				Drg No. 9551-999-POE-J-001	765/132kV Switchyard Single Line Diagram		
140	VI-A	II-D	1 of 14	1.00.00 .3	Cutting of trees of girth more than 30cm shall be done by the Owner	We understand the clause is applicable for the entire scope of the work. Please confirm.	Bidder's understanding is correct
141	VI-B	B-17	18 of 98	Annexure-I	Requirement of Controlled Switching Device for 400KV Circuit Breaker if applicable	We understand that the specification is applicable for 765kV Circuit Breaker as well. Please confirm.	Confirmed.
142	VI-B	B-17	16 of 98	2.12.01	765kV Class Circuit Breakers (AIS) a) Rated continuous current - Minimum 3150/2000 A at rated ambient temperature as per the Single line diagram	1) The details are not available in the tender SLD Drg ref 9500-999-POE-J-001. Please provide the continuous current rating. 2) The Specification of 132kV Circuit breaker not available. Please provide	1. Drawing no mentioned by bidder is not correct. Bidder to refer tender drawing No: 9551-999-POE-J-001 2. Bidder to refer amendment.
143	VI-B	B-17	23 of 98	3.07.01	765kV Isolator a) Rated continuous current at 50deg.cen ambient temperature.- Minimum 3150/2000 A at rated ambient temperature as per the Single line diagram 132kV Isolator a) Rated continuous current at 50deg.cen ambient temperature.- Minimum 2000/1250 A at rated ambient temperature as per the Single line diagram	The details are not available in the tender SLD Drg ref 9500-999-POE-J-001. Please provide the continuous current rating.	Drawing no mentioned by bidder is not correct. Bidder to refer tender drawing No: 9551-999-POE-J-001
144	VI-B	B-17	21 of 98	3.05.01	Isolator shall be gang operated for main blades and earth switches	We understand that the isolators will be electrically gang operated for 765kV and Mechanically gang operated for 132kV. Please confirm.	Bidder understand is correct.

145	VI-B	B-17	43 of 98	9.11.05. f) ix	Contractor shall also provide interconnection (two interconnection per Unit) of Switchyard Earth mat with the Plant earth mat	As the current scope include bay extension work,hence the same is not applicable. Please confirm.	Bidder understanding is correct. However, Bidder to provide atleast Two nos. of interconnection with the earthmat of Main plant of Stgae I to earth mat of Main Plant area of Stage II.
146	VI-A	IIB	11 of 20	1.09.00	SITE SUPERVISION OF EQUIPMENTS The contractor shall ensure that, erection, testing and commissioning of, GIS, Circuit Breaker, Isolator, Instrument Transformer, Surge Arrestor, Substation Automation System & protective relays is carried out, under the supervision of manufacturer of respective equipment.	As per the general practice, OEM supervision during erection, testing and commissioning will be provided for Circuit Breakers, Isolators ,Substation Automation System & protective relays. For other equipments, erection, testing and commissioning will be carried out in bidder supervision. Please confirm.	Bidder proposal is not acceptable. Bidder to comply specification requirement.
147	VI-A	II-B	13 of 20	1.16.08.ix	ABT based energy metering system as indicated in protection SLDs/Metering Architecture and dummy panels for mounting owner supplied meters and its integration with existing ABT system	1) We understand that supply of ABT complaint energy meter is in scope of owner, please confirm. 2) Please provide existing make of ABT meters.	1. Bidder standing is not correct.
				Drg no. XXXX-999-POE-J-005	Protection SLD for GT Bay	3) We understand that Controlled Switching Device is required in the 765kV CB installed in Tie Bay only. Please confirm.	2. Make of ABT meter shall be provided during detail engineering.
				Drg no. XXXX-999-POE-J-009	Protection SLD for TIE Bay	4) Please provide drawings of energy meter panel.	3. CSD is not envisaged in 765 kV Tie Bay.
148					General	In the current switchyard scope, there is no line bays. We understand that Fiber Optic Tele communication Equipments (FOTE) in not envisaged in the current switchyard scope. Please confirm.	Bidder's understanding is correct
149					General- Quality Assurance	We understand for the Illumination System, there is no specific approval required for the System integrator. The illumination items to be procured as per the Customer Quality Assurance requirement.Please confirm.	BIDDER UNDERSTANDING IS CORRECT. BIDDER IS TO FOLLOW NTPC TECHNICAL SPECIFICATIOANS AND GTR
150	VI-B	B-17	34 of 98	8.04.03	Electromechanical Strength 120kN for 765kV Insulator String	We understand the Electromechanical Strength should be 210kN for 765kV Insulator String, please confirm.	Bidder's understanding is correct
151	VI-B	B-17	52 of 98	11.06.00	Electrical System Data	The system data is given for 400kV, please provide data for 765kV	Both options (Gantry/ Tower) are provided to bidder as per site suitability. Any requirement for successful commissioning of the system shall be complied by the
			57 of 98	12.02.01	The normal ruling span of the line shall be 400 meters for 400 KV towers.		
152	VI-B	B-17	89 of 98	15.07.00	Disc Insulator- Electromechanical Strength 120kN	We understand composite polymer insulators are also acceptable.The Electromechanical Strength should be 210kN for 765kV Insulator String Please confirm.	Polymer insulators are not acceptable. Electromechanical Strength of Disc Insulator should be 210kN for 765kV.
153	VI-B	B-17	7 of 98	1.12.03	Type Test to be conducted on AIS Circuit Breaker	We understand that type test list mentioned as per the Schedule 8-B to be considered. Please confirm.	Bidder's understanding is correct
154	Schedule 8-B			2.A & 2.B	Type Test on Ais Circuit Breaker		
155	VI-B	B-23	2 of 8	3.01.01	The 132kV cable shall consists of single core 800 sq.mm stranded copper compacted circular conductor,	Bidder understand the mentioned size is the minimum requirement Please confirm.	Bidder's understanding is correct
156	VI-B	B-23	2 of 8	3.01.04	The cable shall be suitable for installation in air, in built up concrete trench and/or directly buried in soil	1) Bidder understand 02 Circuits of 132kV Cable for interconnection between Station Transformer and 132kV bay. Additional single phase Spare run is not envisaged. Please confirm.	1. Bidder's understanding is correct
	VI-A	IIB	5 of 17	1.09.01	EHV Power cables and accessories 132 kV cables required to feed the Station Transformers along with cable termination at both end and accessories as indicated in the key single line diagram (Drg. No 9551-999-POE-J-001).	2) Bidder understand 02 circuits of the cable can be laid vertically with one circuit over other. Please confirm.	2. Bidders understanding is not correct.
157				Drg 215-POE-F-EH1	132kV Cable trench Drawing	1) Please refer Detail B for Road crossing. Bidder understand that number of 200mm dia Pipes for laying of 132kV EHV cable is as per the number of runs of the cable. Spare Pipes are not envisaged . Please confirm. 2) Along 132kV EHV cable route , there is water canal of approx 10 metre width connecting to Cooling tower-1(CT-1) , it is requested to allow crossing of the canal through steel structure bidge arrangement or through cable trestle. Please confirm.	1. Bidder's understanding is not correct 2. Bidder's proposal is acceptable.
158	VI-B	B-23	3 & 4 of 8	1.09.03	METALLIC SHEATH	Corrugated Al sheath is also acceptable, please confirm.	Bidders understanding is correct.
159	VI-B	B-23	5 of 8	1.09.04	FRP TRENCH COVER	In existing yard, the trench covers are RCC type. Please confirm RCC trench covers are also acceptable.	Bidders understanding is not correct.

160	VI-B	B-24	7 of 8	1.09.06	Where cables cross roads/rail tracks underground, the cables shall be laid in HDPE pipes embedded in PCC in ground with a minimum cover of 1 metre. HDPE pipe shall also be provided where cables cross existing HT/LT cable trenches. The HDPE pipes and accessories shall be supplied, laid and encased in PCC. Ends of HDPE pipes shall be sealed properly after laying of cable.	Bidder understand HDPE pipes to be embedded is as per the number of runs of the 132kV EHV cable, additional HDPE pipes are not envisaged. Please confirm.	Bidder's proposal is not acceptable.
161	VI-A	Annexure C to IIC	13 of 25	1.09.07	Contract quantities for CCTV SYSTEM for O&M	We understand for the current scope,CCTV cameras are not envisaged in the 765kV & 132kV Switchyard extentions. Please confirm.	Bidder's understanding is correct.
162	VI-A	IIB	06 of 17	1.09.08	Station Lighting Out of the total requirement of lighting mast envisaged for station lighting, at least thirty (30) Lighting Masts (30M height) shall be supplied, erected and commissioned at locations identified by Site Engineer prior to construction phase	Bidder understand lighting mast is not envisaged in the 765kV & 132kV Switchyard extentions. Please confirm.	Bidder's understanding is not correct.
163	VI-B	B-17	35 of 98	08.08.01	The Contractor shall fabricate and install mounting arrangements for the support and installation of all the cables on GI angles / Cable tray supports in the trenches/ above ground.	Bidder understand LT Power & Control cables can be laid on GI angles in trenches and Cable trays for above ground laying. Please confirm.	Bidder's understanding is not correct.
164	VI-B	B-17	28 of 98	Table -I & II	Core Details of CT & CVT	Please provide core details of 132kV CT and CVT	Bidder to finalise the 132KV CT & CVT core details as per the requirement of Protection & metering purpose in line with the specification .
165	VI-B	B-13	3 of 45	1.17.00	PLCC panels/communicationpanels of transmission lines etc. shall be housed in AC kiosks in Switchyard	Bidder undertand since there is no line bays, hence PLCC is not applicable. Please confirm.	Bidder's understanding is correct.
166	VI-B	B-17	2 of 98	1.01.14	i)The towers and gantries shall be suitable for a normal conductor tension of minimum 2T/conductor in case of twin moose and 1.5T/conductor in case of quad moose conductor	Bidder understand AAC Bull conductors are strung in the switchyard, please provide normal conductor tension to be considered for bull conductors.	Bidder to comply technical specification requirement.
167					General- Station Lighting	Bidder understand no illumination work is envisaged in the existing switchyard control room building. Please confirm.	Bidder's understanding is correct.
168	VI-A	I-A	40 of 44	7	PROVENNESS CRITERIA FOR CIVIL & STRUCTURAL WORKS	Bidder under that the mentioned Provenness Criteria is not applicable for the Switchyard scope. Please confirm.	Bidder's understanding is not correct. It is applicable to all Civil and Structural Works
169	Section-VIA/Part-B	B-17: SWITCHYARD	471/568	06.04.01	132 kV class Post Insulators	Top & Bottom PCD, Creepage Distance and Height of Insulators are not available in the given tech spec. Kindly furnish the same.	Bidder to design PCD/ Height of insulator. Specific Creepage shall be 31 mm/kV.
170	SECTION – VI, PART-A	SUB-SECTION-IID CIVIL WORKS	661 of 966	1.00.01	Steel structures for following facilities as mentioned below shall be fabricated in factory, transported, and erected at site. 1. Technological Structures such as Boiler, ESP including Hopper and Bunker support Structure. Any structure whose design and fabrication drawings are not provided to Owner shall also be considered as technological structure. 2. Main Power House Building including Control Tower.	Customer is requested to allow bidder to opt for factory fabrication or site fabrication (for all structures including Main Power building structure & Bunker support structure) as per bidder's requirement. NTPC to confirm.	Bidder's proposal is not acceptable
171	SECTION – VI, PART-A	SUB-SECTION-IID CIVIL WORKS	663 of 966	2.01.00 (f)	Sole responsibility of development and maintenance of above facilities for construction workers hired by the Contractor or his sub-contractors shall rest with the Contractor. Land, water, electricity for the worker & staff colony shall be arranged by the Contractor as stipulated elsewhere in Technical Specification.	Customer is requested to identify & provide the land for labour/ worker colony in the proximity of plant area.	Bidder's proposal is not acceptable.
172	SECTION – VI, PART-A	SUB-SECTION-IID CIVIL WORKS	663 of 966	2.02.00 (1)	Construction Water Construction water shall be the responsibility of Bidder during all stages of construction. However, construction water may be provided by Owner at one point on chargeable basis. Bidder shall arrange for further distribution/transportation to required location by their own.	Construction water may be provided by Owner at one point for further distribution. The location of point & its distance from Plant boundary may please be specified. Further, usage of construction water shall be on free of cost basis	Bidder to refer sl.no. 475 of responce_typical_queries shhet

173	SECTION – VI, PART-A	SUB-SECTION-II-D CIVIL WORKS	664 of 966	2.02.00 (6)	The Bidder shall arrange skilled/semiskilled/unskilled labour (from local source(s) as far as available) and supervisory staff for quality execution of all civil, structural, and architectural works.	Bidder shall be executing works through sub-contractors as per contract requirement. Skilled/semi-skilled/unskilled labour will normally be sourced by these sub-contractors through their known sources and employing from local sources shall not be binding on Bidder.	Bidder to follow technical specification
174	SECTION - VI - PART -A	SUBSECTION I-A- PROVENNESS	60 of 966	7.1	PROVENNESS CRITERIA FOR CIVIL & STRUCTURAL WORKS Bidder or its agency should have executed civil and steel structural works of 500 MW or higher capacity coal based/ Lignite based/Nuclear power plant, Earth work in filling involving mechanical compaction and cutting in rock, piling, Main power house building and Foundation for Turbo-generator.	Bidder have executed civil and steel structural works of 500 MW or higher capacity coal based/ Lignite based/Nuclear power plant, Earth work in filling involving mechanical compaction and cutting in rock, piling, Main power house building and Foundation for Turbo-generator. Hence, it is requested that Bidder shall have its own Technical PQR Criteria for qualifying the Sub-agencies and inform customer before award for all the Civil works.	Bidder to refer cl.7.8 of PROVENNESS CRITERIA FOR CIVIL & STRUCTURAL WORKS
175	SECTION - VI - PART -A	SUBSECTION I-A- PROVENNESS	60 of 966	7.2	In case Bidder or its agency (ies) do not meet the requirements at 7.1 and the Bidder proposes to engage agency (ies) for concrete & steel structural works, the proposed agency (ies) should fulfil the following criteria: a) For concrete works (other than TG Foundation), Bidder or its agency (ies) should have executed concrete works of TG building/Bunker building of 500 MW or higher capacity coal based/Lignite based power plant/ TG Building of Nuclear Power Plant/Steel Melting Shop/ Proportioning Bin Building of Steel Plant. b) For Steel Structural works, Bidder or its agency(ies) should have executed steel structural works of TG building/Bunker building of 500 MW or higher capacity (coal based/Lignite based) power plant/ TG Building of Nuclear Power Plant/ Steel Melting Shop/Proportioning Bin Building of Steel Plant.	NTPC is requested to accept the modification: In case Bidder or its agency (ies) do not meet the requirements at 7.1 and the Bidder proposes to engage agency (ies) for concrete & steel structural works, the proposed agency (ies) should fulfil the following criteria: Sub agencies should have executed any Civil / Structural works of 210 MW or higher capacity Coal / Lignite /Nuclear based power plant or Steel plant	Bidder's proposal is not acceptable.
176	SECTION - VI - PART -A	SUBSECTION I-A- PROVENNESS	61 of 966	7.2	Note: In case, Bidder proposes to engage more than one agency for the works mentioned at para 7.2 (a) or 7.2 (b) above, Bidder shall do so on work volume basis. The annual rate of execution in the reference works should not be less than eighty percent (80%) of the asking rate of such works, for which it is being engaged.	Since asking rate for works mentioned at para 7.2 (a) or 7.2 (b) is not available in tender, it will be very difficult to arrive at the rate of execution. Accordingly, Bidder request to delete this clause & allow Bidder to use its own PQR criteria for awarding work to sub-agencies.	Bidder's proposal is not acceptable.
177	SECTION - VI - PART -A	SUBSECTION I-A- PROVENNESS	61 of 966	7.2	c) For Turbo Generator Foundation, Bidder or its agency should have executed at least one (1) TG Foundation of 500MW or higher capacity (coal based/Lignite based) power plant / Nuclear Power Plant.	For Turbo Generator Foundation, sub agencies who have executed any civil work of 210 MW or higher capacity (coal based/Lignite based) power plant / Nuclear Power Plant may be allowed to be qualified.	Bidder's proposal is not acceptable.
178	SECTION - VI - PART -A	SUBSECTION I-A- PROVENNESS	61 of 966	7.3	For civil & steel structural works of Coal Handling Plant, Bidder or its agency should have executed track hopper or wagon tippler of Coal Handling Plant of 500 MW or higher capacity Coal based/Lignite based power plant.	Sub agencies, who have executed any Civil / Structural works of 210 MW or higher capacity coal based/ Lignite based/Nuclear power plant, may be allowed to be qualified.	Bidder's proposal is not acceptable.
179	SECTION - VI - PART -A	SUBSECTION I-A- PROVENNESS	61 of 966	7.4	For civil & steel structural works of Ash Handling Plant, Bidder or its agency should have executed Ash Handling Plant of 500 MW or higher capacity Coal based/Lignite based power plant.	Sub agencies, who have executed any Civil / Structural works of 210 MW or higher capacity coal based/ Lignite based/Nuclear power plant, may be allowed to be qualified.	Bidder's proposal is not acceptable.
180	SECTION - VI - PART -A	SUBSECTION I-A- PROVENNESS	61 of 966	7.5	For civil & steel structural works DM/PT Plant, Bidder or its agency should have executed DM/PT Plant of Thermal/Nuclear Power plant/ Steel plant.	Sub agencies, who have executed any Civil / Structural works of 210 MW or higher capacity coal based/ Lignite based/Nuclear power plant, may be allowed to be qualified.	Bidder's proposal is not acceptable.
181	VI/B	II-A-02	8 of 67	3.07.00	In addition to local indicators, measurement system (4-20mA Output) for remote indication shall also be provided on all the four furnace walls.	A proven product meeting this specific requirement is not available in the market/online sources. Hence, M/s NTPC is requested to provide type of measurement and detailed specification for furnace thermal expansion measurement system.	Bidder to provide thermal expansion measurement inline with Specification requirement. Same shall be discussed during detailed engg

182	VI/A	II-A-01	24 of 28	2.30.00	6. Flue Gas Ducts to be provided with strain gauge/ ash level meter at sharp bend locations of duct and common duct area after airpreheater.	M/s NTPC is requested to provide type of measurement and detailed specification for flue gas duct ash level meter.	Bidder to provide any type of measuring instrument suitable for monitoring of dust level in the flue gas duct. Further same shall be discussed and finalized during detailed engineering.
183	VI/B	II-A-02	6 of 67	3.02.01	The variance of tube outlet temperature shall be validated by carrying out site demonstration for the first boiler during commissioning by affixing metal temperature thermocouples at each evaporator outlet tube (at intermediate header inlet, if applicable, and vertical wall outlet). These thermocouples shall be over and above the requirements for metal temperature thermocouples specified elsewhere.	M/s NTPC is requested to provide detailed specification for metal temperature thermocouples to be provided for this purpose.	Specification requirement is clear. Bidder shall comply to technical specification. Same shall be further discussed during detailed engineering.
184	VI	Part C	58 of 119	30.00.00	The equivalent 'A' weighted sound pressure level measured at a height of 1.5 m above floor level in elevation and at a distance of one (1) meter horizontally from the nearest surface of any equipment/machine, furnished and installed under these specifications, expressed in decibels to a reference of 0.0002 microbar, shall not exceed 85 dBA.....	The noise level of Diesel Engine set required for Fire Water Pump will be as per OEM standard. No enclosure will be provided for emergency DE required for Fire water pump set. Customer is requested to confirm the same.	Bidder's undersatnding is not correct. Bidder to comply with specification requirement. Necessary enclosure shall be provided to meet noise level as per specification.
185	VI	Part B--A18	3 of 14	5.04.00	Location of Infrared detectors on coal conveyors	1. One infra red detector shall be located near head of the coal/biomass conveyor. Infra red detector is not considered at the tail end of the conveyor. 2. No infrared detectors are considered for limestone, gypsum, ash and biomass conveyors. Customer may please confirm.	1. Bidder's proposal is acceptable 2. Bidder's understanding is not correct. Bidder shall provide infrared detectors for all biomass conveyors complying to technical specification.
186	VI	Part B--A18	5 of 14	5.08.03	Interface between fire water pumps PLC, Fire Detection & Alarm (FDA) and plant DCS	1. Fire water pumps PLC shall be interface with station wide LAN for two –way transfer of signals for information sharing through dual fibre optic connectivity. 2. Fire detection & alarm system shall be interfaced with Fire water pumps PLC (drives running status) via hardwiring with interface modules. 3. Fire detection & alarm system shall be interfaced with plant DCS (fire alarm and system trouble) via hardwiring with interface modules. Customer may please confirm.	1. Bidder's proposal is not acceptable. Bidder shall comply to specification requirements. 2. Bidder's proposal is not acceptable. Bidder shall comply to specification requirements. 3. Bidder's proposal is not acceptable. Bidder shall comply to specification requirements.
187	VI	Part B--A18	8 of 14	5.15.00	Cabling for Fire Detection & Alarm (FDA)	1. Cable size of 1 Pair x 1.5 sqmm, armoured, shielded shall be used for loop wiring. 2. Cable size of 2C x 2.5 sqmm armoured shall be used for powering various devices in loop and solenoid valves of spray system 3. Inside buildings cables shall be laid directly on the wall with saddle spacers. No conduit shall be used for laying FDA cables. 4. In conveyor areas, cables shall be burried along the conveyor length with HDPE conduits. Customer may please confirm.	1. Bidder's proposal is not acceptable. Bidder shall comply to specification requirments. 2. Noted 3. Bidder's proposal is not acceptable. Bidder shall comply to specification requirements. 4. Bidder's proposal is not acceptable. Bidder shall comply to specification requirements.
188	VI	Part B--A18	10 of 14	5.18.00	Multisensor detector shall be provided for return air ducts of main plant, which shall consist of intake probe, detector housing, and exhaust pipe etc. The detector shall be mounted outside the duct.	Duct detectors are not considered as multisensor detectors shall be provided in the AHU room. Customer may please confirm.	Muti sensor detectors shall be provided inside AHU room and Duct detectors shall be provided inside return air duct.
189	VI	Part B--A18	8 of 14	5.13.00	Power Supply for Fire Alarm Panels & Repeater Alarm Panel	Fire Alarm Panels shall be powered from 1 no. of 230 V AC plant UPS system. Customer may please confirm.	Bidder's proposal is not acceptable. Bidder shall comply to specification requirements.