

SECTION-PROJECT

1.0 GENERAL

- 1.1. Power Grid Corporation of India Ltd. (POWERGRID), a Govt. of India Enterprise is responsible for bulk Power transmission of electrical energy from various Central Govt. Power Projects to various utilities/beneficiaries and interconnecting regional grids, operating and maintaining the National electrical grid of India. It is established with mandate of "We will become a Global Transmission Company with Dominant Leadership in Emerging Power Markets with World Class Capabilities by:
- a. World Class: Setting superior standards in capital project management and operations for the industry and ourselves.**
 - b. Global: Leveraging capabilities to consistently generate maximum value for all stakeholders in India and in emerging and growing economies.
 - c. Inspiring, nurturing and empowering the next generation of professionals.
 - d. Achieving continuous improvements through innovation and state of the art technology.
 - e. Committing to highest standards in health, safety, security and environment” as its mission.
- 1.2. Establishment of Kurnool-III PS and Transmission scheme from Kurnool-III PS to Kurnool (New) & Kurnool-III PS to Maheshwaram has been approved in 10th NCT meeting held on 07.11.2022 for integration of 4.5 GW RE potential from Kurnool REZ as part of 66.5 GW RE Projects. Further, NCT has approved the modifications proposed by CTU in the scope of design / layout of Kurnool-III PS during 20th NCT meeting held on 25.06.2024.
- 1.3. Scope of the transmission scheme to be implemented through “400KV AIS Substation Extension Package of Kurnool-3 PS” through RTM route are as under-
- Augmentation of transformation capacity at 765/400/220KV Kurnool-III PS by 2x500 MVA, 400/220kV ICT (8th & 9th) and 5nos. 220KV line bays
 - i) 400kV ICT bay- 2 Nos.
 - ii) 220kV ICT bay- 2 Nos.
 - iii) 220KV Line bays- 5 Nos.
 - iv) 220KV Bus Coupler Bay-1No.
 - v) 220KV Transfer Bus coupler Bay-1No.
 - vi) 220KV Bus sectionalizer Bay-1No.
- Note:- 2nos. 500MVA, 400/220/33kV Transformer shall be procured separately under a different package and is excluded from this package.
- Implementation of common facility works at Kurnool-3 PS for providing connectivity to RE generation projects
 - 400kV bus works for 10nos. dias (Including 2nos. dias for 2nos. Transformer bays to be constructed) – 1 set
- 1.4. It is the intent of this specification to describe primary features, materials, and design & performance requirements and to establish minimum standards for the work. The specification is not intended to specify the complete details of various practices of

SECTION-PROJECT

manufactures/ bidders, but to specify the requirements with regard to performance, durability and satisfactory operation under the specified site conditions.

- 1.5. The work to be done under this specification shall include all labour, plant, equipment, material and performance of all work necessary for the complete installation and commissioning of switchyard. All apparatus, appliances, material and labour etc. not specifically mentioned or included, but are necessary to complete the entire work or any portion of the work in compliance with the requirements implied in this specification is deemed to be included in the scope of contractor.
- 1.6. Before proceeding with the construction work the Contractor shall fully familiarize himself with the site conditions and General arrangements & scheme etc. Though the Employer shall endeavor to provide the information, it shall not be binding for the Employer to provide the same. The bidders are advised to visit the substation sites and acquaint themselves with the topography, infrastructure and also the design philosophy. The bidder shall be fully responsible for providing all equipment, materials, system and services specified or otherwise which are required to complete the construction and successful commissioning, operation & maintenance of the substation in all respects. All materials required for the Civil and construction/installation work including cement and steel shall be supplied by the Contractor. Complete design (unless specified otherwise in specification elsewhere) and detailed engineering shall be done by the Contractor.

2.0 SCOPE:

2.1 The broad scope of this specification shall cover followings:

Station Name	765/400/220kV Kurnool-3 PS
Extension Voltage Level	400kV
Bus-Switching Scheme	One and a Half Breaker Scheme
Fault level	63kA/1sec
Voltage Level	220kV
Bus-Switching Scheme	Double Main & Transfer
Fault level	50kA/1sec

2.2 The detailed scope of work of the substation package is brought out in subsequent clauses of this section.

2.2.1 Extension of 765/400/220kV Kurnool-3 PS:

Some of the Tower & Beam structures, switchyard equipment and other materials for the completion of works due to Rearrangement in layout of Kurnool-III PS are already available at site. List of the equipment/material along with quantities which are already available at site for the completion of works due to Rearrangement in layout of Kurnool-III PS is enclosed as Annexure-4 in list of documents.

Technical Specification, Section – Project (Rev.00)

Technical Specification for 400KV AIS Substation Extension Package of Kurnool-3 PS

SECTION-PROJECT

2.2.1.1 Design, engineering, manufacture, testing at manufacturer's works, supply including transportation and insurance, unloading, storage, erection, testing and commissioning at site the following equipment/items, complete in all respects:

- A)** Supply, erection, testing and commissioning of Two (2) nos. 500MVA, 400/220/33kV Three Phase Auto transformers at 765/400/220kV Kurnool-3 PS are covered under separate package. However, all associated work such as connection to switchyard bay, HVWS & Hydrant Protection of Auto transformers, power & control cabling from common Marshalling box of bank/Marshalling box of three phase unit to Local Control panel Rooms/Control Room (Except special cables from OLTC to RTCC panel), earthing of autotransformers, civil work for Transformer foundation & Firewall etc. are under present scope of work.
- B)** Erection, Testing & Commissioning of 400kV Circuit Breakers, Isolators, Current Transformers and 336kV Surge Arresters.
- C)** Erection, Testing & Commissioning of 245kV Circuit Breakers, Isolators, Current Transformers and 216kV Surge Arresters.
- D)** Supply, Erection, Testing & Commissioning of 420KV & 245kV Bus post Insulators.
- E) CONTROL, RELAY & PROTECTION SYSTEM (As per BPS):** Complete Control, Relay and Protection system (for bays under present scope) as per Section–Control and Relay Panels. Any modification required in the existing protection scheme is also included in the present scope
- a. Augmentation of 400KV & 220kV bus bar protection for the bays under present scope:
- Existing 400kV & 220kV Bus bar protection scheme is Type REB500 of M/s Hitachi make. The Peripheral units (PU) for bays under present scope is available at site.
 - Necessary shifting /modification, wiring/cabling, augmentation and integration along with supply of Aux/Trip Relays etc for completion of 400& 220kV Bus Bar protection is under present scope and same is to be quoted under respective item available in Installation schedule of BPS.
 - Also, LBB protection for bay no. 446, 447, 449 & 450 shall be configured and commissioned in the existing Bus bar bay peripheral unit for the bay.
 - CRP panels for 400kV & 220kV bays under present scope shall be placed in existing SPR panel.
- b. Augmentation of Substation Automation System: for bays as per BPS (bay as defined in technical specification, Section-Substation Automation System):

SECTION-PROJECT

- Existing substation is equipped with substation automation system (based on IEC-61850) of M/s Hitachi make. The Substation Automation System shall be augmented for the bays under present scope.
- It shall be the responsibility of the contractor to successfully integrate the BCUs and protection IEDs with existing substation automation system (which is based on IEC 61850) including updating of system database, displays, and development of additional displays and reports as per requirement for the bays covered under present scope. Additional license for SAS is not envisaged under the present scope.
- Necessary interface equipment and integration work at existing substation for transferring data to NTAMC, Backup NTAMC, RTAMC for Remote operation and to RLDC (RSCC) /NLDC (for supervision) through optical fibre based SDH communication link is also under present scope. However, no work is envisaged at remote end (RLDC/NLDC/NTAMC/RTAMC etc) under the present scope.

F) CABLES (As per BPS): 1.1kV grade Power & Control cables (and special cables, if any) along with complete accessories. Methodology for supply, installation & sizing of 1.1kV Power & Control cables shall be as per “Specific Requirement Rev 10”.

G) ERECTION HARDWARE (as per BPS): Clamps & connectors (including terminal connectors for employer supplied 400/220kV ICT), Conductor, Aluminum tubes, Bus bar and earthing materials, Bay marshalling box, spacers, cable sealing arrangement, insulating mats, cable supporting angles/channels, Cable Pull pit, Cable trays & covers, Junction box, buried cable trenches etc.

H) INSULATOR STRINGS AND ASSOCIATED HARDWARE: As per BPS

Insulator strings and associated hardware fittings under present scope shall be provided by the contractor as per Bid Price Schedule (BPS).

I) Main Earthmat: As per BPS

40mm MS rod for the main earth mat shall be supplied under separate regional package.

Existing Main Earthmat is to be extended for bays under present scope. Laying of Main earthmat shall be paid separately, as per actual laid quantity.

However, all the equipment, cable terminations, all Gantry support structures, equipment's structures, cable trenches, auxiliary earth mat for isolators/Earth Switches etc. shall be earthed by connecting them to the main Earth mat by the contractor & the same is deemed to be included in the respective BPS Item of Erection Hardware.

SECTION-PROJECT

- J) ILLUMINATION (As per BPS):** LED based Lighting and illumination for the switchyard area under present scope shall be provided by the contractor.
- K) LIGHTNING PROTECTION (DSLPL):** The lightning protection (DSLPL) for area under present scope is to be provided by the contractor. The contractor shall design the lightning protection by utilizing the structures being provided under present scope. In case, additional structures (Lightning Masts) are required to meet the lightning protection, the contractor shall provide the same. The cost for provision of lightning masts shall be measured in MT and paid under associated BPS item. Associated earthing materials, hardware etc. is deemed to be included. The civil works shall be payable as per relevant item of BPS.
- L) FIRE PROTECTION SYSTEM (As per BPS):** Fire protection system (HVW spray system & hydrant system) for Owner supplied 500MVA, 400/220kV 3-Ph Autotransformer. The existing piping (for Fire protection system) shall be suitably extended for this purpose. Under the present scope, contractor shall integrate the annunciation/alarm signals of 400/220kV 3-Ph Autotransformer with the existing Annunciation panels placed in the FFPH building /Control room Building & this will include all necessary items/cables.

2.2.1.2 Design, engineering, manufacture, testing and supply including transportation & insurance, storage and testing at site of mandatory spares as per Bid Price Schedule (BPS).

2.2.1.3 CIVIL WORKS & SUPPORT STRUCTURE:

Lattice and pipe structures (galvanized):

- a) All required galvanized Lattice & Pipe structures, Towers, Beams, LM and Equipment support structures except support structures for Circuit Breaker shall be provided as per Employer's drawings during detailed engineering.
- b) The support structure for Circuit Breaker shall be as per manufacturer's design & shall be deemed to be included in the cost of respective CB.
- c) Fabrication, proto-assembly, supply including transportation & insurance, unloading, storage, erection and commissioning of tower, beam and equipment support structures (wherever applicable) including nuts, bolts, fasteners and foundation bolts complete in all respect.
- d) In the bid price schedule, the gantry structures, equipment support structures, nuts, bolts and fasteners & foundation bolts are indicated in Metric Ton (MT) and shall be paid as per respective items of BPS.
- e) The civil works shall be payable as per relevant item of BPS.
- f) Proto-corrected drawings and Bill of Materials of all structures like towers, beams, equipment support structures etc. shall be in the scope of Contractor.

SECTION-PROJECT

- g) Design and drawings of items (if any) not covered above shall be prepared and put up for approval by the Contractor during detailed engineering.
- h) The proto corrected drawings along with BOM are to be witnessed and certified by the contractor. Certified proto corrected drawings along with BOM shall be submitted to POWERGRID for information only. Contractor shall provide editable soft copies of drawings (**including Proto-corrected Shop-floor DWG in AUTOCAD**) & BOMs during detailed engineering.

Civil works:

- A. The design of foundation shall be based on the soil investigation report and other parameters as per relevant IS codes & technical specification.
- B. Wind and seismic data shall be considered as per the latest NBC 2016.
- C. All RCC shall be of Design mix with M-25 grade unless specified otherwise.
- D. The scope of civil work shall include but shall not be limited to the following based on **drawings developed by the contractor:**

- i) **Site levelling work:** will be covered under separate regional package.

- (ii) Stone spreading and anti-weed treatment including PCC in the switchyard.**

Stone has already been laid in some portion of the switchyard area under present scope. In this area scope shall be Removal, cleaning and washing of existing stone, refurbishing additional stone (if required) and re-spreading after doing anti-weed treatment & PCC.

In the area under present scope where stone spreading does not exist, the same shall be provided along with anti-weed treatment & PCC. Layout for the same shall be developed by the contractor.

- (iii) Dismantling and re-erection of chain link fencing and disposal of unserviceable material.

- (iv) Foundation for lighting poles, bay marshalling boxes, panels and control cubicles wherever required. The cost of these foundations shall deemed to be included in erection/installation of corresponding item/ equipment of BPS.

- (v) If any non-standard tower or equipment support structure is envisaged during detailed engineering, the same shall be designed by the contractor and submitted to Employer for approval.

- (vi) Foundation of non-Standard structures (if any).

- (vii) Any other item/design/drawing required for successful completion of the scope of works.

- E. **The scope of civil work shall include but not be limited to the following based on drawings developed by POWERGRID:**

SECTION-PROJECT

Construction of roads, Drains and chain link fencing works are covered under separate regional package.

(i) Cable Trenches:

Cable trenches shall be constructed as per POWERGRID standard drawings provided in tender. However, Cable trench layout shall be prepared by vendor for approval of POWERGRID based on the standard sections.

(ii) Transformer Foundation:

Foundation of Transformer including Rail cum road, unloading platform, jacking pad, Oil tank, pulling blocks, gratings, common oil pit etc. as per technical specification.

(iii) Fire resistant wall

(iv) Rail Cum Road

(v) Equipment Support Structures and their foundations

400/220 kV Equipment support structures and their foundations.

(vi) 220 kV Gantry Towers and Beams:

220 kV Gantry tower and beam.

(vii) LM Structure

(viii) Foundations:

a) Foundations of 220 kV Towers and LM.

b) The foundations of these structure are including of embedment/grouting of foundation bolts.

F. For buildings (if any), the complete civil works including internal and external finishing, stone soling for flooring, plinth protection, drain along plinth protection, electrical conduit and junction boxes, fan boxes, cable transit system etc. required to complete the building in all respect as per the drawing shall be payable in the plinth area rate. However, the quantity of the earthwork (excavation, backfilling, disposal etc.), concrete (all types), reinforcement steel, shall be measured and paid under respective items under BPS.

2.3 The work to be done under this specification shall include all labour, plant, equipment, material and performance of all work necessary for the complete installation and commissioning of the switchyard. All apparatus, appliances, material and labour etc. not specifically mentioned or included, but are necessary to complete the entire work or any portion of the work in compliance with the requirements implied in this specification is deemed to be included in the scope of contractor

SECTION-PROJECT

- 2.4 Before proceeding with the construction work, the Contractor shall fully familiarize himself with the site conditions and General arrangements & scheme etc. Though the Employer shall endeavor to provide the information, it shall not be binding for the Employer to provide the same. The bidders are advised to visit the substation sites and acquaint themselves with the topography, infrastructure and also the design philosophy. The contractor shall be fully responsible for providing all equipment, materials, system and services specified or otherwise which are required to complete the construction and successful commissioning, operation & maintenance of the substation in all respects. All materials required for the Civil and construction/installation work including cement and steel shall be supplied by the Contractor. Complete design (unless specified otherwise in specification elsewhere) and detailed engineering shall be done by the Contractor.
- 2.5 The Contractor shall also be responsible for the overall co-ordination with internal/external agencies, project management, loading, unloading, handling, moving to final destination for successful erection, testing and commissioning of the substation/switchyard.
- 2.6 Design of substation and its associated electrical & mechanical auxiliaries systems includes preparation of single line diagram, electrical layout, foundation & cable - trench layouts (including invert levels), erection key diagrams, direct stroke lightning protection, electrical and physical clearance diagrams, Control and protection schematics, wiring and termination schedules, design of firefighting system, outdoor lighting/illumination and other relevant drawings & documents required for engineering of all facilities within the fencing to be provided under this contract, are covered under the scope of the Contractor.
- 2.7 Any other items not specifically mentioned in the specification but which are required for erection, testing and commissioning and satisfactory operation of the substation are deemed to be included in the scope of the specification unless specifically excluded.
- 2.8 Employer has standardized its technical specification for various equipment and works for different voltage levels. Items, which are not applicable for the scope of this package as per schedule of quantities described in BPS, the technical specification for the items should not be referred to.

3 SPECIFIC EXCLUSIONS

The following items of work are specifically excluded from the scope of the specifications:

765/400/220kV Kurnool-3 PS Extn: -

- a. Employer's site office and stores.
- b. Transit Camp

SECTION-PROJECT

- c. Boundary Wall
- d. Soil Investigation
- e. Approach Road outside substation boundary wall
- f. ACDB & DCDB Extension
- g. Roads, Drains and chain link fencing
- h. Land development works

4 PHYSICAL AND OTHER PARAMETERS

4.1 Location of the Substation – The location of substation is indicated below:

Sr. No	Name of Substation	Name of State	Nearest Rail Head
1.	Kurnool-3 PS Extn	Andhra Pradesh	Kurnool

4.2 Meteorological data - The meteorological data are as below

Altitude	Less than 1000 meter above mean sea level (MSL)
Snow fall	NIL
Seismic Zone	NBC 2016
Wind Zone	NBC 2016
Min./Max. Ambient Temperature	0 / 50 degree centigrade
Coastal Area consideration	No. However, Minimum specified creepage distance for all the equipment shall be 31mm/KV.

4.3 Fault level shall be considered as mentioned below:-

Sl. No.	Name of Substation	400kV	220kV
1.	Kurnool-3 PS Extn	63kA for 1 Sec	50kA for 1 Sec

5 SCHEDULE OF QUANTITIES

The requirement of various items/equipment and civil works are indicated in Bid price Schedules.

All equipment/items and civil works for which quantities has been given in the BPS shall be payable on unit rate basis. During actual execution, any variation in such quantities shall be paid based on the unit rate under each item incorporated in Letter of award.

Wherever the quantities of items/works are indicated in Lot/Set, the bidder is required to estimate the quantity required for entire execution and completion of works and incorporate their price in respective Bid price schedules. For erection hardware items, Bidders shall estimate the total requirement of the works and indicate module-wise lump sum price bay wise and include the same in relevant Bid price schedules. Any material/works for the modules not specifically mentioned in the description in BPS, as may be required shall be deemed to be included in the module itself. No cost compensation shall be considered on account of "Set/LOT/LS" items in any case of number of bays specified in section project remains unchanged. Bidder should include

SECTION-PROJECT

all such items in the bid proposal sheets, which are not specifically mentioned but are essential for the execution of the contract. Item which explicitly may not appear in various schedules and required for successful commissioning of substation shall be included in the bid price and shall be provided at no extra cost to Employer.

6 BASIC REFERENCE DRAWINGS

- 6.1 The reference drawings, which form a part of the specifications, are given at Annexure-I. The bidder shall maintain the phase to earth clearance, phase to phase clearance and sectional clearances, clearances between buses, bus heights but may alter the locations of equipment to obtain the statutory electrical clearances required for the substation.
- 6.2 It is responsibility of contractor to develop single line drawing, general arrangement drawing, layout drawings, foundation & cable trench layout, erection key diagram & all other layout drawings for present scope of work. Layout drawings shall be finalized during detailed engineering based on best engineering practices and meeting the requirements of bidding documents.

7 DIFFERENT SECTIONS OF TECHNICAL SPECIFICATION

Employer has standardized its technical specification for various equipment and works for different voltage levels. Items, which are not applicable for the scope of this package as per schedule of quantities described in BPS, the technical specification for the items should not be referred to. For the purpose of present scope of work, technical specification shall consist of following sections and they should be read in conjunction with each other.

1	Section-Project	Rev 00
2	Section-General Technical Requirement (GTR)	Rev 15
3	Section-Switchgear- CB	Rev 11
4	Section-Switchgear- ISO	Rev 13
5	Section-Switchgear- Instrument Transformer	Rev 12
6	Section-Switchgear- Surge Arrester	Rev 13
7	Section-Power and Control Cables	Rev 06
8	Section-Lighting System	Rev 07
9	Section-Fire Protection System	Rev 06
10	Section – LT Switchgear	Rev 05
11	Section-Air Conditioning System	Rev 04
12	Section-Switchyard Erection	Rev 10
13	Section- Structures	Rev 07
14	Section-Civil Works	Rev 12
15	Section-Control and Relay Panels	Rev 09
16	Section-Substation Automation System	Rev 04
17	Section-Telecommunication Systems	Rev 05
18	Section – PMU	Rev 01

- 8 Minimum specified creepage distance for all the equipment shall be 31mm/KV.**

SECTION-PROJECT

9 SPECIFIC REQUIREMENT

SI.NO.	Description	Remarks
9.1	The specific requirements as mentioned at C/ENGG/SPEC/SEC-PROJECT/SPECIFIC REQUIREMENT Rev. No 10 shall also be referred for specified scope of work. Any discrepancy between clause 9.0 Section-PROJECT and Annex-II on scope of works, the requirement stipulated at clause 9.0 of section project shall prevail	
9.2	Each circuit of a double circuit transmission line shall be terminated in different diameters.	
9.3	Clause no 1.3 of Section- Circuit Breaker Rev 11 is modified as The circuit breaker shall be complete with operating mechanism, common marshalling box, piping, inter-pole cables, cable accessories like glands, terminal blocks, marking ferrules, lugs, pressure gauges, density monitors (with graduated scale), galvanized support structure, their foundation bolts and all other accessories required for carrying out all the functions of the CB.	Section- Circuit Breaker Rev 11
9.4	Clause no 15.2 vii) of Section- Circuit Breaker Rev 11 is modified as "For Low & High temperature type test, Field performance report of CB's as per IEC 62271-100 revision 2008 (covering amendment-2 in 2017) is also acceptable as valid Type test report."	
9.5	Clause no 6.2.1 of Section- Lighting System Rev 07 is modified as "6.2.1 CONSTRUCTIONAL FEATURES OF LIGHTINNG PANELS ii) All Outdoor Lighting Panels shall be of Sheet steel atleast 2.0 mm thick cold rolled or 2.5 mm hot rolled or alternately 1.5 mm thick stainless steel of Grade 304 and shall be dust, weather and vermin proof. Panels shall be of smoothly finished, leveled and free from flaws. Stiffeners shall be provided wherever necessary."	Section- Lighting System Rev 07
9.6	Clause no 6.6. (i) (b) of Section- Lighting System Rev 07 is modified as (i)"JUNCTION BOXES b) The outdoor junction boxes shall be complete with conduit knockouts/ threaded nuts and provided with terminal strips. The junction boxes shall be suitable for termination of Cable glands of required size. The junction boxes shall be provided with 4-way knockouts suitable for street lighting/switchyard lighting terminals suitable for 2 numbers 4C x 16 Sq.mm Al. cable or as per requirement. All Outdoor Junction boxes shall be of Sheet steel at least 2.0 mm thick cold rolled or 2.5 mm hot rolled or alternately 1.5 mm thick stainless steel of Grade 304. Outdoor Junction Boxes shall be suitable for mounting on columns, structures etc for Outdoor Lighting. The outdoor Junction shall have IP 55 protection."	
9.7	Requirement Specified at clause no 29 of Section CRP Rev 9 for STANDALONE DISTURBANCE RECORDER (for 765 KV Feeders only) stands deleted.	CRP, on Need basis
9.8	"Minimum specified creepage distance for insulator string/ longrod insulators/ outdoor bushings shall be 31 mm/kV"	
9.9	Integration of ODS (On-line Oil Drying system) based on IEC-61850, for 765/400 and/or 400/220kV Transformers being	

SECTION-PROJECT

	(supplied under separate package) with substation automation system is also included under present scope	
9.10	Clause no 41 (b) of Section- Section - Control & Relay Panel Rev 09 is modified as: "POWERGRID has standardised binary input/output details, indication details, DR signals & texts, etc. of protection IEDs, SAS HMI Signal List, Protection Panels CT/VT circuit termination detail, Trip Logic etc. and the same shall be used by contractor during detail engineering for preparation of schematics. Standardised documents are attached as Folder APPENDIX-C. Panel nomenclature, terminal blocks identification, as applicable, shall be according to typical detail given at APPENDIX-B"	Section - Control & Relay Panel Rev 09
9.11	First Para under Clause no. 8.2 of Section- Substation Automation System Rev 04 is modified as "The supplier shall submit a test specification for factory acceptance test (FAT) and commissioning tests of the station automation system including Control Relay Protection (CRP) for approval based on the standard SAS/CRP FAT procedure of POWERGRID. The Standard SAS FAT format & procedure is provided at Appendix-II & the Standard CRP FAT format & procedure is provided at Appendix-III for reference guideline. For the individual bay level IED's applicable type test certificates shall be submitted."	Section- Substation Automation System Rev 04
9.12	Clause no mentioned under section D of Specific requirement Rev 08 for Section Switchgear-INST Rev 11- Deleted.	Section Switchgear-INST Rev 12
9.13	Clause no mentioned under section E of Specific requirement Rev 08 for Section Switchgear-Isolator Rev 12- Deleted	Section-Isolator Rev 13
9.14	Clause no mentioned under section F of Specific requirement Rev 08 for Section Switchgear-Surge Arrester Rev 12- Deleted.	Section- Surge Arrester Rev 13
9.15	Clause no mentioned under section O of Specific requirement Rev 08 for Section-Structure Rev 6- Deleted.	Section- Structures Rev 7
9.16	Clause no mentioned under section P of Specific requirement Rev 08 for Section -Civil works Rev 11A- Deleted.	Section -Civil works Rev 12

In Section-GTR and other technical specifications, the term 'Employer and/or 'Purchaser may be read as Employer.

Annexure-1	LIST OF DRAWINGS
Annexure-2	SPECIFIC REQUIREMENTS (Section-Project) - C/ENGG/SPEC/SEC-PROJECT/SPECIFIC REQUIREMENT Rev. No 10
Annexure-3	FREQUENTLY ASKED QUESTIONS
Annexure-4	List of the equipment/material along with quantities which are already available at site for the completion of works due to Rearrangement in layout of Kurnool-III PS