



SOUTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LTD.
Corporate Office, 6-1-50, Mint Compound :: Hyderabad-63

Amendment to the Tender Specification No.

CE/(Projects)/TGSPDCL/RURAL SCADA :05/2025-26

Supply, Installation, Testing, Commissioning (SITC) and Maintenance (for a period of five years) of SCADA System for 116Nos. 33/11KV Substations located at District Headquarters and key towns of Rural Circles in TGSPDCL in Telangana state.

Corrigendum – 02

I. Amendments to the Bid document

Sl. No.	As per Bid Document	Existing Clause	Now Read As
1	Section-I NIB, Sl.No.10, Pg.No.6	Bid Amount: Rs.51.01 Crores (Ex-Works)	Bid Amount: Rs.49.2Crores (Inclusive of taxes)
2	Section-I NIB, Sl.No.11, Pg.No.6	Bid Security (INR): Rs.1.20 Crores (2% of the Bid Amount plus GST @18%)	Bid Security (INR): Rs.0.98 Crores (2% of the Bid Amount)
3	Section- III ITB, Clause.No.21 (BID SECURITY) , Pg.No.21	The Bidder shall furnish, as part of its bid, a Bid Security amount of Rs.1.20 Crores (2% of the Bid Amount plus GST @18%).	The Bidder shall furnish, as part of its bid, a Bid Security amount of Rs.0.98 Crores (2% of the Bid Amount).
4	Section-VI QR,Clause No.1 Financial, QF3: Sl.No.ii., Pg.No.129	The total turnover shall be Rs.60 Crores during the last five years certified by CA.	The total turnover shall be Rs.50 Crores during the last five years certified by CA.
5	Section-VI QR,Clause No.1 Financial, QF3: Sl.No.v, Pg.No.130	The bidder should have successfully executed at least two Turnkey contract of SCADA System in last 10 years in INDIA in any power utility/ Government organizations/Limited companies for Electrical distribution system. The Cumulative value of contracts shall not be less than Rs.30Cr for the total contracts executed during the last 5 years.	The bidder should have successfully executed at least two Turnkey contract of SCADA System in last 10 years (as on date of opening of the Bid) in INDIA in any power utility/ Government organizations/Limited companies for Electrical distribution system. The Cumulative value of contracts shall not be less than Rs.25 Cr for the total contracts executed during the last 5 years (as on date of opening of the Bid).
6	Section-VI QR,Clause No.1 Financial, QF2: Pg.No.129	Both lead bidder and consortium partner together should meet 100% of the estimation cost.	Both lead bidder and consortium partner together should meet 100% of the estimation cost in best 3 years in the last 5 FYs.
7	Section-VI QR, Clause No.2 Technical, Sl.No.ii, Pg.No.130	The bidder should have supplied minimum 50Nos. RTUs, 400Nos IEDs and necessary accessories in India directly or through System Integrator (SI). The performance certificate for at least 2nos Distribution Networks Systems working satisfactorily should be enclosed with the bid.	The bidder should have supplied minimum 50 nos. RTUs, 400Nos IEDs and necessary accessories in India directly or through System Integrator (SI) in the last 5years. The experience of OEM for supplying the quantity mentioned in respect of RTUs and IEDs will be considered. In addition, OEM has to furnish an affidavit on Back to Back Guarantee for 5years along with system integrator. The performance certificate for at least 2nos Distribution Networks Systems working satisfactorily should be enclosed with the bid.

8	Section-VII Sample Forms, Form 3: Forms of Securities, Pg.No.139	Bid Security Deposit: Along with the Technical Bid, the Vendor shall submit the Bid security deposit of Rs. 1.20crores (Rupees One Crore Twenty Lakhs only). In case of the non-selected parties, the amount would be returned within 28 days of the end of the bid validity period.	Bid Security Deposit: Along with the Technical Bid, the Vendor shall submit the Bid security deposit of Rs. 0.98 crores (Rupees Ninety Eight Lakhs only) . In case of the non-selected parties, the amount would be returned within 28 days of the end of the bid validity period
9	Section-IV Technical Specifications, Clause 1.4.1, Pg.No.67	RTU including Transducers shall conform to the type tests listed in the relevant table. Type test reports of tests conducted in NABL accredited Labs or internationally accredited labs within last 5 years from the date of bid opening may be submitted.	RTU including Transducers shall conform to the type tests listed in the relevant table. Type test reports of tests conducted in NABL accredited Labs or internationally accredited labs within last 10 years from the date of bid opening may be submitted.
10	Section-IV Technical Specifications, Clause 12, IED Relay, Sl.No.4, Pg.No.112	Auxiliary Supply 18-30 V DC $\pm$ 15 % Ripple	Auxiliary Supply 19.2V-30 V DC $\pm$ 15 % Ripple
11	Section-IV Technical Specifications, Clause 13, IED Differential Relay, Pg.No.117	Auxiliary Supply 18-30 V DC $\pm$ 15 % Ripple	Auxiliary Supply 19.2V-30 V DC $\pm$ 15 % Ripple
12	Section- III ITB, Clause.No.56.7 (Warranty), Pg.No.44	"Upon receipt of such notice, the Supplier will within 30 days repair or replace the defective Materials/equipment or parts thereof, free of cost at the ultimate destination. The supplier will take over the replaced parts/Materials/equipment at the time of their replacement. No claim whatsoever will lie on the Purchaser for the replaced parts/Materials/equipment thereafter". In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/replaced material will be extended to a further period of 12 months.	"Upon receipt of such notice, the defective equipment or materials reported under the warranty period are restored or replaced from the inventory within 24 hours from the date of notification/Service or complaint call by the TGSPDCL, free of cost at the ultimate destination. The defective equipment shall be replenished/replaced within two (2) weeks in the rolling stock. The supplier will take over the replaced parts/Materials/equipment at the time of their replacement. No claim whatsoever will lie on the Purchaser for the replaced parts/Materials/equipment thereafter". In the event of any correction of defects or replacement of defective material during the warranty period, all replaced or repaired equipment will carry the warranty for the remaining period of the original warranty or 18 months from the replacement date, whichever is later.
13	Section-IV Technical Specifications, Clause 12, IED Relay, Pg.No.112	Relays should have at least 10 element's "Flexible Protection" function, allowing us to configure the protections associated with Current, Voltage Inputs, DIs & DOs using logical conditions. These options are essential for configuring additional Over Current, Earth Fault protection, Voltage related and power related functions in along with the default built-in functions.	The protections required are (1). PF protection (2). Power protection

14	Section-IV Technical Specifications, Clause 13, IED Relay, Pg.No.119	Relays should have at least 18 element's "Flexible Protection" function, allowing us to configure the protections associated with Current, Voltage Inputs, DIs & DOs using logical conditions. These options are essential for configuring additional Over Current, Earth Fault protection, Voltage related and power related functions in along with the default built-in functions.	The protections required are (1). PF protection (2). Power protection
15	Section-IV Technical Specifications, Clause 1.2.1, RTU Functions, Pg.No.54		Addition of Clause: FRTU class models are not accepted. Only RTU class models are accepted.

II. Inclusion of Additional Clauses to the Section IV-Technical Specifications

The following additional clauses are incorporated after Sl.No.15 of the Technical Specifications:

16. Clause: Warranty, Software & Support Obligations

Back-to-Back Warranty and Support:

- i) A tender specific authorization to be given by the bidder in a Rs.100/- bond paper mentioning that OEM will give back to back service support to the bidder and mentioning the firmware supply if any up gradations released as mentioned in the Annexure (Manufacturer Authorization Form)
- ii) The Original Equipment Manufacturer (OEM) shall extend full back-to-back warranty and technical support to the Purchaser through the System Integrator/Authorized Supplier.
- iii) In the event of default, non-performance, or insolvency of the authorized supplier, the OEM shall unconditionally assume direct responsibility toward the Purchaser for the repair, replacement, or rectification including integration of the supplied IEDs, RTUs, and associated components to ensure uninterrupted operation of the system. TGSPDCL will provide necessary support as per the bid conditions.
- iv) The warranty shall cover all hardware, firmware, and software supplied as part of the system and shall remain valid for a minimum period of five (5) years from the date of Go-Live, unless otherwise specified in the tender.

17. Enterprise Software License:

- i) The OEM shall supply the system software, including configuration, communication, and diagnostic tools, under an Enterprise License exclusively registered to (Utility Name / TGSPDCL)
- ii) The license shall be perpetual, transferable within the DISCOM's infrastructure, and without restrictions on the number of installations, users, or configuration transfers within authorized sites.
- iii) Under no circumstances shall the supplied version be limited, trial, or OEM-restricted.

18. Software Upgrades and Enhancements:

- i) All OEM-released software and firmware upgrades, revisions, or patches during the warranty and maintenance period shall be made available free of cost to the Purchaser.

- ii) OEM shall ensure backward compatibility and provide version-release documentation and installation assistance as part of the inclusive upgrade policy.

19. Port and Communication Access:

- i) All hardware and communication ports—whether utilized or not at the time of commissioning—shall remain fully accessible by default to the TGDISCOM’s for future integration, testing, or diagnostic purposes.
- ii) These shall include but not be limited to Ethernet, RS-485, Fiber, USB, Serial, and Communication Bus interfaces.
- iii) No port, gateway, or interface shall be password-locked, license-limited, or hardware-blocked except where necessitated by cybersecurity policies jointly approved by TGDISCOM and the OEM.

20. Support Commitment:

- i) The OEM shall maintain a fully functional support infrastructure in India and provide technical support, spare parts, and remote assistance throughout the warranty and the spares parts shall be maintained for the above supplied models for at least 15 years by the OEM’s.
- ii) An escalation matrix as indicated in the bid shall be furnished, ensuring 24x7 technical assistance during the operational tenure of the system.

21. Support SLA Metrics for RTU/IED and other associated equipment.

- i) Helpdesk Availability: 24 x 7 x 365 (phone/email/online portal)
- ii) First Response Time: Within 2 business hours of reporting for all incidents.
Remote Diagnostic Response: Within 2 hours of request
Onsite Support Dispatch: Within 24 hours of escalation (if remote resolution fails and site visit is required)
Spare Part Replacement: Within 2 business days for critical modules, 5 business days for non-critical modules.
Software/Firmware Patch: Within 5 business days of discovery/reporting of critical vulnerability or bug.

The Bidder shall submit the escalation matrix in the prescribed format as below and shall be a part of MOU before issuing LOI.

Escalation Level	Contact Person	Designation	Contact Mode	Escalation Time
Level 1	System Integrator	Service Engineer	Phone/Email /Portal	Immediate
Level 2	OEM	Field Service Engineer	Phone/Email	If not resolved within 24 hours

Level 3	System Integrator/ OEM Regional Service Head	Regional Manager	Phone/Email	If not resolved within 3 business days
Level 4	System Integrator/ OEM National Service Lead	National Head	Phone/Email	If not resolved within 7 business days
Level 5	System Integrator/ OEM Technical Director	Director/C TO	Written/Call/ Escalation Letter	If not resolved within 10 business days

OEM must provide all contacts, including name, designation, email, and mobile numbers, prior to commissioning.

Escalation to each higher level is automatic if resolution doesn't occur within the stipulated period at the current level.

All incident logs and resolutions should be documented and made available to the TGSPDCL on request.

22. Penalty Clause for Replacement of Defective Equipment (IED/RTU) and associated equipment

i) Defect Liability and Replacement Timeframe:

- The System Integrator/OEM shall keep requisite inventory of critical spares and 4% of new equipment at service center at Hyderabad as a rolling stock.
- The defective equipment or materials reported under the warranty period are restored or replaced from the inventory within 24 hours from the date of notification/Service or complaint call by the TGSPDCL.
- The defective equipment shall be replenished/replaced within two (2) weeks in the rolling stock.
- The spares parts shall be maintained for the above supplied models for atleast 15 years by the OEM's.

ii) Penalty for Delay:

- In case the System integrator/OEM fails to replace or rectify the defective material within the stipulated timeframe of two weeks, the Purchaser reserves the right to impose a penalty as follows:

iii) Penalty Rate:

A penalty @ 0.5% of the contract value of the affected equipment per week of delay or part thereof.

iv) Maximum Penalty:

- The penalty shall not exceed 5% of the contract value for the particular defective equipment or material.

v) Recovery of Penalty:

- The penalty amount shall be deducted from the pending bills, performance bank guarantee, or any other dues payable to the supplier.

vi) Additional Remedies:

- In case the System Integrator/OEM fails to replace the defective material as per the contract terms, the TGSPDCL reserves the right to procure the replacement from alternate sources at the risk and cost of the System Integrator/OEM. Any excess cost so incurred will be recovered from the supplier along with penalty.

vii) Warranty Coverage:

- All replaced or repaired equipment will carry the warranty for the remaining period of the original warranty or 18 months from the replacement date, whichever is later.

23. Training

i) Scope of Training

- The supplier shall conduct comprehensive training programs for Employer's engineers, operators, and maintenance staff and any other staff as designated by TGDSCOM's covering the design, configuration, operation, and maintenance of the Substation Automation System (SAS) including IEDs, RTUs, and communication networks.

ii) Type of Training

- Classroom Training: Theoretical familiarization with IEDs, RTUs, protocols (IEC 61850, 60870-5-101/104), and SCADA integration.
- Practical / Hands-on Training: Demonstrations on actual or simulated setups including system configuration, data mapping, fault simulation, and troubleshooting.
- Factory Training: Conducted at the manufacturer's works to cover system design, FAT procedures, and database preparation.
- Site Training: Covering installation, commissioning, and maintenance using actual site equipment.

iii) Training Content

a) For IEDs:

- Use of IED configuration tools such as Offliner, RCP, or vendor configurators for setting up protection and control functions.
- Engineering substation communication with SCL (Substation Configuration Language) files, creating and visualizing SCD/ICD files.
- Mapping and testing GOOSE messaging for fast peer-to-peer communication and interlocking schemes.

- Configuration of time synchronization and sequence of events (SOE) data handling.
- Practical exercises using IEC 61850 testing tools (e.g., IEDScout, SVScout, Wireshark) for conformance, interoperability, and performance testing.
- Sampled values (SV) data setup and testing with merging units and IEDs
- (Client-server communication demonstration with MMS protocols and troubleshooting communication issues.
- Analysis of communication traffic and system behavior using capturing tools and simulation software. Configuration using vendor tools (e.g., DIGSI, PCM600, IED Configurator).
- Logical node structure per IEC 61850 and GOOSE configuration.
- Event/alarm handling, firmware updates, and device diagnostics.

b) For RTUs:

- Hardware architecture and module identification.
- Protocol configuration (IEC 101/104, Modbus, DLMS).
- Database management, control logic development, and SOE analysis.
- Network and communication diagnostics.

c) Integrated SAS:

- End-to-end data flow between process, bay, and station levels.
- SCADA interface configuration and historian integration.
- Cybersecurity, redundancy management, and disturbance analysis.

(iv) Duration and Participants

Session duration is not definite - Each session has to complete all the related concepts

Sl. No.	Device	No. of participants	No. of theory sessions	No. of Hands on sessions
1	RTU	30	3	3
2	Relay for all protection and supervision functions	30	3	3
3	UPS	30	3	3
4	DCPS			
5	Router			
6	TMU			
7	LDMS	30	3	3

(v) Training Deliverables

- a.** Detailed training manuals, configuration tools, and demo databases.
- b.** Practical sessions with pre-configured hardware (IEDs/RTUs).
- c.** Post-training evaluation and certification of participants.

(vi) Certification and Reports

- a.** Upon completion, the supplier must issue training completion certificates and submit detailed reports covering attendance, content, and performance of participants to the Employer.
- b.** Equip trainees with hands-on skills in IEC 61850 substation automation, including IED configuration, GOOSE messaging, sampled values, and system communication testing using industry-standard tools.

III. Manufacturer Authorization Form (MAF)

(To be executed as an MOU between System Integrator and OEM and to be submitted/ uploaded along with the bid.)

Ref No.: _____

Date: _____

To,
The Chief Engineer/Projects, TGSPDCL,
4th Floor, Corporate Office,
Mint Compound,
Hyderabad-500004.

Subject: Manufacturer Authorization for Tender No. _____ for Supply
of _____.

Dear Sir/Madam,

We, M/s [Name of Manufacturer], a company duly organized and existing under the laws of [Country/India], with our registered office at [Address], do hereby constitute, appoint, and authorize M/s [Name of Bidder/System Integrator], having its registered office at [Address], as our lawful and true attorney to submit and participate in the aforementioned tender process for the supply, installation, commissioning, and after-sales support of:

_____ For example (Intelligent Electronic Devices (IEDs))

_____ (for example Remote Terminal Units(RTUs))

_____ for example (Associated Protocol Converters, Software, and Accessories.)

We further declare and confirm that:

M/s [Name of Bidder] is our authorized business partner for this tender.

We unconditionally undertake to honor all product warranty, support, spares, technical guidance, and upgrades, as defined in the tender and contractual documents, if the contract is awarded to our authorized partner.

We shall provide necessary support for training, troubleshooting, and replacement of products as per terms of the tender.

We the Original Equipment Manufacturer (OEM) shall extend full back-to- back warranty and technical support to the TGSPDCL through the System Integrator/Authorized Supplier.

In the event of default, non-performance, or insolvency of the authorized supplier, the OEM shall unconditionally assume direct responsibility toward the Purchaser for the repair, replacement, or rectification including integration of the supplied IEDs, RTUs, and associated components to ensure uninterrupted operation of the system duly taking the necessary support of TGSPDCL as per the bid conditions.

The warranty shall cover all hardware, firmware, and software supplied as part of the system and shall remain valid for a minimum period of five (5) years from the date of Go-Live, unless otherwise specified in the tender.

This authorization is valid exclusively for the current tender and does not confer appointment for any other purpose.

We affirm that all representations made by our authorized partner in connection with this tender shall be considered as made with our full knowledge and consent.

We certify that the above statements are true and correct.

IN WITNESS WHEREOF, this authorization is executed on this _____ day of

_____, 20, at [Location].

(Signature with Name and Seal)

For and on behalf of M/s[Manufacturer's Name]

Name: _____

Designation: _____

Contact Number: _____

E-mail: _____

Witness 1:

(Name, Address & Signature)

Witness 2:

(Name, Address & Signature)

Note:

The MOU of the System Integrator and OEM of the above Format shall be uploaded.

The successful bidder shall enter a Tri-party MOU between System Integrator, OEM and TGSPDCL of the above Format that is uploaded during the Bid before issue of LOI.

To be signed by an authorized person (attach Power of Attorney if not signed by the Managing Director or Board resolution holder).

Affix the Manufacturer's and Bidder's official company seals.

**Chief Engineer/ Projects
TGSPDCL::Hyderabad.**