SPECIAL TERMS AND CONDITIONS (Important Conditions):

1. Bidder has to provide technical demonstration of islanding scheme at the location and as per LOGIC of islanding scheme given by SLDC GETCO, failing to which bidder will be technically dis-qualified. No second trial/chance for technical demonstration shall be provided. Bidder shall provide the technical demonstration within given schedule and no second/other schedule shall be provided to the bidder.

2. Commercial bid opening shall be carried out for technical qualified bidders only. POC/ technical demonstration of offered solutions shall be carried out at free of cost and location technical demonstration will be shared by SLDC GETCO.

3. Relevant catalogue / literature of the required material must be submitted invariably by the Bidder failing to which, bidder will be technically-disqualified and any correspondence shall not be made in this regard.

4. Any discrepancy in any documents of the tender then the scope of work will be final and biding to the bidder.

5. The Bidder should submit the comprehensive report with architecture of the proposed solutions, project charter, mention the part / product numbers of offered items. They should submit the product literature for the quoted products.

6. All Quoted items must match or equivalent technical specification in PART-II. Bidder has to supply the materials as per BOQ and provide service in islanding scheme to achieve the objective of the project.

7. Bidder has to support for firmware upgradation or license version upgradation for the supplied materials for adopting new features and technologies for next 5 years after successfully commissioning of islanding scheme at free cost.

8. Bidder has to visit site as and when required by SLDC GETCO and resolve the issue arise in supplied materials at the site without any additional cost.

10. No logic to be required to be executed from existing M/s.GE SCADA System at SLDC and three Sub-SLDCs (Jambuva-Jetpur-Gandhinagar). Bidder shall provide functionality of SMS and email service for regular systems logs and other reports of the islanding scheme.

9. Bidder has to submit the type test report of RTU which should not be older more than 5 years. In case of any discrepancy or non-availability of report, then SLDC decision will be final and bidding to the bidder.

10. Bidder has to carry out all types cables laying & wiring required for implementation of islanding scheme at sub-station and SUB-SLDC end. E.g. from power supply source to RTU panel, internal module wiring, internal MFM wiring, DI and DO card wiring, UFR relay wiring, earthing, etc.

11. SLDC GETCO will provide logic for implementation of islanding scheme and based on the same, each bidder has to configure and implement logic in RTU and provide technical demonstration to ensure the functionality of islanding scheme at site and incase of bidder fail to provide successful technical demonstration, then bidder will be technically-dis-qualified without any further correspondence. This technical specification is for islanding scheme. However, the final logic/engineering shall be done at the time of implementation with the successful bidder.

Scope of Work

Implementation of Islanding Scheme at Kutch and Jamnagar with Supply, Installation, testing and commissioning of islanding scheme at two locations (Kutch and Jamnagar) and related accessories as per technical specifications and scope of work.

Technical Demonstration of offered solutions for Islanding Scheme: --

SLDC GETCO will provide logic for implementation of islanding scheme and based on the same, each bidder has to provide technical demonstration to ensure the functionality of islanding scheme at site.

In case of bidder fail to provide successful technical demonstration, then bidder will be technically-dis-qualified without any further correspondence.

1. Scope of the Work/Job includes Supply, Installation, Testing & Commissioning of Islanding Scheme at two locations (Kutch and Jamnagar) in Gujarat state as per technical specifications and scope of work.

2. Bidder has to carry out site survey of each locations / sub-stations before implementation of islanding scheme and submit the BOQ for each sub-stations for final approval from SLDC GETCO or Bidder may visit the locations before bidding the bid with prior approval from SLDC GETCO.

3. Delivery of materials and Installation and commissioning period will be 12 months from the date of kick of meeting and issue of commencement letter. Commencement letter will be issued separately. Bidder has to submit the comprehensive project charter.

4. The bidder has to Supply, Installation, and Testing & Commissioning of various equipment as per BOQ and all associated equipment at various GETCO locations as per technical specifications under the Islanding scheme. Bidder has to commission all type of analog and digital data with RTU and provide necessary cables and accessories for the same and commission the RTU as per technical specifications.

5. The bidder has to mention in the bid that, this is the best technology that bidder can deliver and implement the technologies in conjunction with a set of best practices guidelines & industry standards.

6. Successful Bidder has to submit the barchart indicating following details

    - Site survey report of each location
    - Supply of materials at site
    - Approval of engineering drawings of materials
    - Approval of BOQ
    - Inspection
    - FAT
    - SAT
    - Commissioning of materials
    - TOC

7. Bidder has to install and commissioning all materials to integrate analog and digital data i.e. CMR Relay, Switch, Router, Modem, GPS, Firewall etc. with necessary base, terminal block, cables, tag, ferruling of cables, cable ties, nut bolts, earthing cables, cables for MFM, cables for RTU integration etc as per actual site conditions and based on the site survey report.

8. Actual quantity for supply, testing, installation and commissioning of RTU at 220KV Sub-Stations,132KV Sub-stations and 66KV Sub-stations can be differ from tender quantity at the time of place of order to supplier. Bidder has to supply the incremental quantity of respective items to implement islanding scheme with the same quoted rate in BOQ of the tender.

9. Bidder has to lay all types of cables as per BOQ of the tender required for integration and commissioning of RTUs and SIC panel i.e control cable, LAN cable, communication cable, fiber cable, armored cable etc. between control panel and RTU Panel and SIC panel at sub-station end. Bidder has to integrated all types of analog and digital signals as per requirement of ISLANDING SCHEME. All types of cables shall be gland and proper termination in the respective panels with ferrule and tagging in proper industrial standard.

10. Bidder has to integrate all devices as per proposed network architecture and any deviation shall be submitted separately for approval and then after bidder may implement the revised/amended architecture in the field.

11. Bidder shall submit the updated architecture with signal list and signed. Bidder has to submit the engineering drawing of each equipment’s used in implementation of islanding scheme i.e RTUs, MFM, GPS, Switch, DI card, DO Card, RTU Panel, SIC Panel, UFR, all types of cable etc. in the submission of technical bid with detail diagram. Bid without drawings, bidder will be technically-disqualified.

12. In demonstration bidder has to install & commission the RTUs at location given by SLDC, Gotri and match the real time data with actual field data otherwise offer will be evaluated accordingly.

13. Bidder has to submit the acceptance test reports; performance test reports of each RTU validated by accredited laboratory NABL and it should not be older then more than 5 years and as per tender technical requirements.

14. Bidder has to submit the complete diagram and connectivity of each feeder with Multi function meter upto RTU end of each location and connectivity diagram of Circuit breaker to digital input module of RTU.

15. If any new bay/feeder/transformer/ Line LILO occur in existing sub-stations after installation and commissioning of islanding scheme, then bidder has to integrate the new bay/feeder/transformer/ Line LILO in supplied RTU and related accessories without any extra cost. However, additional material will be provided on chargeable basis if spare material is not available for integration of new bay come after commissioning of site.

16. The offered RTU/devices must comply to the type, range, accuracy, resolution and operating temperature conditions of the specifications.

17. Bidder shall supply the RTU as mentioned in technical specification should be provided with complete accessories i.e. connectors, cable meter cable and mounting fixtures etc.

18. All the installation and commissioning work will be carried out only in presence of engineer in-charge and with prior intimation. The standard timing for carried out any work is from 9AM to 6PM.

19. The installation and commissioning team shall observe all safety measure as per GETCO norms.

20. Bidder has to provide full correspondence details along with his full name and details with team members having email address, telephone no, communication address etc.

21. Bidder has to submit the BAR CHART with detail of project execution time line, schedule planning for each and every installation on various locations, schedule date for project completion, number of engineer and technician for carrying out the project.

22. Bidder has to visit SLDC-Gotri office and discuss the detail plan for execution of project in the kick off meeting with project chart bar and provide the complete details installation and commissioning of Islanding Scheme at two places before starting the execution.

23. If installation and commissioning work is not found satisfactory observed by engineer in-charge then bidder has to take necessary action to resolve the problem without charging any extra cost.

24. Installation and technician team can leave the site after taking the permission and instruction from engineer in-charge from GETCO without that work will be considered as incomplete.

25. Each RTU output data will be validated with actual real time data. Both data will be compared. Both data should be identical.

26. **Cables**:-

All cables should be laid by bidder and wiring of the same should be carried out at sub-station and SUB-SLDC end. Cable should be laid in proper route and it is as per instruction of engineer incharge.

1. Following Cable should be used in CT/PT extension Wiring and input to MFM:-

R (Red colour)- 2.5 sq mm insulated flexible cable

Y (Yellow colour) - 2.5 sq mm insulated flexible cable

B(Blue colour)- 2.5 sq mm insulated flexible cable

N(Black colour)- 2.5 sq mm insulated flexible cable

Above cable will be used for analog data integration with MFM and MFM with 3ph-4wire or 3ph-3wire technology. PT Cable shall be supplied as per technical specifications of the tender.

2. Following cable should be used for internal MFM wiring: -

0.5 sq mm 4 core shielded screened armored cable

3. Cable for Circuit breaker wiring to digital input module (DI CARD AND DO CARD):-

1.5 sq mm three core shielded armored. Same cable will be used for integration of digital input upto RTU panel. (Auxiliary relay and necessary C channel should be provided by bidder if there is no potential free contacts are available at site)

4. Cable for provide input supply to RTU: -

2.5sq mm 2 core shielded armored cable.
GETCO will provide the 48V DC/110VDC/220VDC power supply. Bidder has to lay the cable from power supply panel to RTU panel as per instruction of engineer in charge. All type of cables laying will be in the scope of bidder and

need to procure conduit pipe as and when need at the site for protection of cables.

Individually shielded twisted pairs of wires with an overall shield may be used by the Customer for connections between the Multi-function meter and the analog inputs at the RTUs. The system shall have high noise immunity from stray circulating currents in the cable shield.
Common-mode noise rejection: 90 dB minimum, 0 to 60 Hz. Normal-mode noise rejection: 60 dB minimums at 60 Hz. Adjacent channel voltage isolation: withstand the common-mode voltages of any two channels on the same analog input module differing at least 35 volts AC or peak AC.

27. **Accessories**: -

Bidder has to supply following accessories with RTU

Auxiliary relay with base and 2 NO+2 NC contact for integration of circuit breaker with DI module.
4 Inch C channel for mounting of Auxiliary relay
Necessary nuts and bolts for mounting and installation
Necessary cable for integration, configuration & maintenance of RTU
License software CD and tools
Necessary training documents
Cable for communication between Gateway and SCADA Server primary and secondary at SUB-SLDC end.

28. **List of Deliverable-Schedules**/:-

The bidder shall fill in the following schedules which form part of the tender specification and offer only signed stamped

GTP	Guaranteed Technical Particulars (GTP) fill up with value and details
Performance Certificate/Type Test Report	Bidder's past supply with performance certificates and all type test reports to SLDC-GETCO.
Capability	Bidder's supply capability of the offered quantity in the tender
Spare list	Recommended spares/list of consumables
Brochure	Brochure of each equipment
Type test report	Type test report of each devices if applicable
Man power	List of technical Manpower with qualification and experience
Life of RTU	Mentioned the life of supplied devices
Network diagram	Complete network diagram for connectivity from sub-station to control centre end.

If the schedules are not submitted duly filled in with the offer, bidder will be technically-disqualified. Unless otherwise brought out separately by the bidder, the

test set offered shall be deemed to conform to the specification, as listed in this tender, scrupulously.

For any deviation from the specification which is not specifically brought out in the Schedules shall be supported by authentic documents, standard and clarification, otherwise the offer may be liable for rejection. Any deviation from the specification shall be highlighted giving reasons and unit prices.

Bidder shall submit the list of orders for similarly type of equipment, executed or under execution, with full details in the schedule of tenders experience (Schedule 'C') to enable the purchaser to evaluate the offer. If the equipment is being designed and manufactured in collaboration with other manufacturer, the following additional information shall be submitted by the bidder along with his offer.

a. Copy of authorization between the Bidder and manufacturer.
b. List of order for offered equipment, executed/ being executed by the Supplier.

51. Work completion certificate will be issued after successfully completion of project with following points.

1) NOC received from each location based on successfully completed installation and commissioning of islanding scheme.
2) Data validation of each RTU in real-time
3) Real-time data availability of each devices at respective SUB-SLDC and SLDC,Gotri.
4) Submission of detail drawings of each supplied devices.
5) Submission of license and firmware details of each supplied devices.
6) Submission of warranty period of all-supplied devices
7) Installation and commissioning report of each devices signed by engineer incharge.
8) OEM undertaking shall be submitted for providing support and service after successfully installation and commissioning of islanding scheme.