CORRIGENDUM -2 FOR NIT NO: CMC/BR/26-27/FK/PR/KG/1347 for Design, Supply, ETC & Handing over of IoT-enabled Low tension (LT) Feeder monitoring system at Janakpuri Division, BRPL		
CORRIGENDUM DATE: 09-04-2026		
Sl. No.	**As per Tender Description**	**Corrigendum**
1	**Financial Bid**	In order to incorporate different type of solutions offered by bidders under the ambit of specification, following flexibility has been added as corrigendum and updated in the revised BOQ attached as Annexure-I - All electronic devices of FMU and IOT Gateway has been clubbed into a "Set" for each type of architecture (Type-1, 2, & 3) so that number and type of constituent electronic units may be optimally designed by the bidders. - But, number of Sims per substation shall not exceed two, - **Smart meter can also be used as electronic device**
2	Clause 13.1.2 of GCC: Maintain a vulnerability disclosure window of thirty-six (36) months following delivery	To be revised from 36 months to the AMC period (60 months). Beyond the AMC period, it shall be on a mutually agreed basis.
3	IP56 (Price Bid section)	Revised to IP 65 in Revised Financial bid attached as Annexure-I
4	SLA Penalty Framework	Attached as Annexure-II
5	Pre-Bid Queries	Attached as Annexure-III
6	Site Photographs	Attached as Annexure-IV

ANNEXURE-I

VOLUME – II

FINANCIAL BID (PRICE FORMAT)

SUMMARY OF THE QUOTED PRICES

SCHEME DESCRIPTION	Scheme No	Sub-division	Total price for supply incl all Taxes & freight (INR)	Total for Erection, Testing & Commissioning incl all Taxes (INR)	Comprehensive AMC for 5 Years incl all Taxes (INR)	Grand Total (INR)
Design, Supply, Erection, Installation, Testing, Commissioning & Handing over of IoT-enabled Low tension (LT) Feeder monitoring system at Janakpuri Division, BRPL New Delhi	1	B-1 JKP				
	2	C-3 JKP				
	3	D2 JKP				
	4	MAYAPURI				
	5	SUBHASH NAGAR				
Total (incl. GST)						
In Words						

We declare that the following are our quoted prices in INR for the entire project/schemes.

Date: Bidder Name:

Place: Bidders Address:

Name & Signature ……..

Designation: ……

Common Seal: ……

Note: Bidder has to submit Price Bids for all the schemes in the package compulsorily. Any Partial Price bid is liable for rejection.

Note:

1) Cost of all tests as per technical specification is to be included. No separate charges will be paid.
2) All prices for the packages quoted are inclusive of taxes and duties, GST and freight etc. Bidder shall include & indicate any others taxes under the applicable law(s) for supply and services to be performed in the purchaser's country.
3) Bidder shall include & indicate any others taxes under the applicable law(s) for supply and services to be performed in the purchaser's country.

4) The bidder shall, at its own, handle all imported equipment's and handle all formalities for custom clearances, port charges, etc. if any
5) All prices for the packages quoted are against the scope of work under the contract shall be executed strictly as per the NIT conditions and the technical specification.
6) Quoted prices shall be as per the Bill of quantities (BOQ) as attached. However, any items/material/machinery, not specifically mentioned In BOQ as well as in the technical specifications but required for successful completeness, Erection, Testing and Commissioning of the package awarded shall be deemed to be in the scope of the bidder.
7) Insurance as per the clause defined in GCC/SCC and other contract conditions, is included in the quoted prices. However, Bidder shall indicate the value of the insurance taken, separately.
8) Site visit is advisable prior to submission of quotation.

PRICE BID (SUPPLY, SERVICES, CIVIL)

Division – Janakpuri

Scheme no.1

B-1 JKP Sub-division

Scheme -1 B-1 JKP
Supply

S.No	Item Description	Qty	UOM	Basic (Rs)	Freight (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Supply of LT Feeder Monitoring Unit (FMU) consisting of 3 current transformers (for R, Y, B phases), 3 voltage sensors, without any electronic unit which will be installed on each LT feeder / overhead branch section as per technical specification.	729	Set					
2	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-1 Architecture capable of aggregating and transmitting data of up to 7 LT feeders as per specification	64	Set					
3	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-2 Architecture capable of aggregating and transmitting data of up to 14 LT feeders as per specification	41	Set					
4	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-3 Architecture capable of aggregating and transmitting data of up to 3 LT feeder overhead branch sections as per specification	53	Set					

ERECTION, TESTING & COMMISSIONING (ETC)

S.No	Item Description	Qty	UOM	Basic (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Installation, Testing, Commissioning and Integration of LT Feeder Monitoring Unit (FMU) consisting of 3 current transformers (for R, Y, B phases), 3 voltage sensors without electronic unit along with wired/wireless communication interface, mounting arrangement, wiring harness, conduits and all accessories required for monitoring one LT feeder / overhead branch section as per technical specification.	729	Lot				
2	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-1 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 7 LT feeders as per specification.	64	Lot				
3	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-2 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 14 LT feeders as per specification.	41	Lot				
4	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-3 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 3 LT feeder overhead branch sections as per specification.	53	Lot				

ANNUAL MAINTENANCE CONTRACT (AMC)

S.No	Item Description	Qty	UOM	Basic (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Comprehensive Annual Operation & Maintenance Contract (AMC) for the entire IoT-enabled LT Feeder Monitoring System for 5 years from date of commissioning, including preventive maintenance, troubleshooting, firmware upgrades, replacement of faulty hardware, communication issue resolution and system health monitoring as per SLA defined in the specification.	20	Qtr				

Refer Technical Specifications for complete understanding of scope of work.

PRICE BID (SUPPLY & SERVICES)

Division – Janakpuri

Scheme no.2

C-3 JKP Sub-division

Scheme -2 C-3 JKP
Supply

S.No	Item Description	Qty	UOM	Basic (Rs)	Freight (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Supply of LT Feeder Monitoring Unit (FMU) consisting of 3 current transformers (for R, Y, B phases), 3 voltage sensors, without any electronic unit which will be installed on each LT feeder / overhead branch section as per technical specification.	354	Set					
2	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-1 Architecture capable of aggregating and transmitting data of up to 7 LT feeders as per specification	25	Set					
3	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-2 Architecture capable of aggregating and transmitting data of up to 14 LT feeders as per specification	22	Set					
4	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-3 Architecture capable of aggregating and transmitting data of up to 3 LT feeder overhead branch sections as per specification	26	Set					

ERECTION, TESTING & COMMISSIONING (ETC)

S.No	Item Description	Qty	UOM	Basic (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Installation, Testing, Commissioning and Integration of LT Feeder Monitoring Unit (FMU) consisting of 3 current transformers (for R, Y, B phases), 3 voltage sensors without electronic unit along with wired/wireless communication interface, mounting arrangement, wiring harness, conduits and all accessories required for monitoring one LT feeder / overhead branch section as per technical specification.	354	Lot				
2	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-1 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 7 LT feeders as per specification.	25	Lot				
3	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-2 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 14 LT feeders as per specification.	22	Lot				
4	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-3 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 3 LT feeder overhead branch sections as per specification.	26	Lot				

ANNUAL MAINTENANCE CONTRACT (AMC)

S.No	Item Description	Qty	UOM	Basic (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Comprehensive Annual Operation & Maintenance Contract (AMC) for the entire IoT-enabled LT Feeder Monitoring System for 5 years from date of commissioning, including preventive maintenance, troubleshooting, firmware upgrades, replacement of faulty hardware, communication issue resolution and system health monitoring as per SLA defined in the specification.	20	Qtr				

Refer Technical Specifications for complete understanding of scope of work.

PRICE BID (SUPPLY & SERVICES)

Division – Janakpuri

Scheme no.3

D2 JKP Sub-Division

Scheme -3 D2 JKP
Supply

S.No	Item Description	Qty	UOM	Basic (Rs)	Freight (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Supply of LT Feeder Monitoring Unit (FMU) consisting of 3 current transformers (for R, Y, B phases), 3 voltage sensors, without any electronic unit which will be installed on each LT feeder / overhead branch section as per technical specification.	279	Set					
2	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-1 Architecture capable of aggregating and transmitting data of up to 7 LT feeders as per specification	24	Set					
3	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-2 Architecture capable of aggregating and transmitting data of up to 14 LT feeders as per specification	16	Set					
4	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-3 Architecture capable of aggregating and transmitting data of up to 3 LT feeder overhead branch sections as per specification	20	Set					

ERECTION, TESTING & COMMISSIONING (ETC)

S.No	Item Description	Qty	UOM	Basic (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Installation, Testing, Commissioning and Integration of LT Feeder Monitoring Unit (FMU) consisting of 3 current transformers (for R, Y, B phases), 3 voltage sensors without electronic unit along with wired/wireless communication interface, mounting arrangement, wiring harness, conduits and all accessories required for monitoring one LT feeder / overhead branch section as per technical specification.	279	Lot				
2	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-1 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 7 LT feeders as per specification.	24	Lot				
3	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-2 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 14 LT feeders as per specification.	16	Lot				
4	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-3 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 3 LT feeder overhead branch sections as per specification.	20	Lot				

ANNUAL MAINTENANCE CONTRACT (AMC)

S.No	Item Description	Qty	UOM	Basic (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Comprehensive Annual Operation & Maintenance Contract (AMC) for the entire IoT-enabled LT Feeder Monitoring System for 5 years from date of commissioning, including preventive maintenance, troubleshooting, firmware upgrades, replacement of faulty hardware, communication issue resolution and system health monitoring as per SLA defined in the specification.	20	Qtr				

Refer Technical Specifications for complete understanding of scope of work.

PRICE BID (SUPPLY & SERVICES)

Division – Janakpuri

Scheme no. 4

Mayapuri Sub-division

Scheme -4 Mayapuri
Supply

S.No	Item Description	Qty	UOM	Basic (Rs)	Freight (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Supply of LT Feeder Monitoring Unit (FMU) consisting of 3 current transformers (for R, Y, B phases), 3 voltage sensors, without any electronic unit which will be installed on each LT feeder / overhead branch section as per technical specification.	925	Set					
2	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-1 Architecture capable of aggregating and transmitting data of up to 7 LT feeders as per specification	73	Set					
3	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-2 Architecture capable of aggregating and transmitting data of up to 14 LT feeders as per specification	52	Set					
4	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-3 Architecture capable of aggregating and transmitting data of up to 3 LT feeder overhead branch sections as per specification	67	Set					

ERECTION, TESTING & COMMISSIONING (ETC)

S.No	Item Description	Qty	UOM	Basic (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Installation, Testing, Commissioning and Integration of LT Feeder Monitoring Unit (FMU) consisting of 3 current transformers (for R, Y, B phases), 3 voltage sensors without electronic unit along with wired/wireless communication interface, mounting arrangement, wiring harness, conduits and all accessories required for monitoring one LT feeder / overhead branch section as per technical specification.	925	Lot				
2	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-1 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 7 LT feeders as per specification.	73	Lot				
3	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-2 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 14 LT feeders as per specification.	52	Lot				
4	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-3 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 3 LT feeder overhead branch sections as per specification.	67	Lot				

ANNUAL MAINTENANCE CONTRACT (AMC)

S.No	Item Description	Qty	UOM	Basic (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Comprehensive Annual Operation & Maintenance Contract (AMC) for the entire IoT-enabled LT Feeder Monitoring System for 5 years from date of commissioning, including preventive maintenance, troubleshooting, firmware upgrades, replacement of faulty hardware, communication issue resolution and system health monitoring as per SLA defined in the specification.	20	Qtr				

Refer Technical Specifications for complete understanding of scope of work.

PRICE BID (SUPPLY & SERVICES)

Division – Janakpuri

Scheme no. 5

Subash Nagar Sub-division

Scheme -5 Subash Nagar
Supply

S.No	Item Description	Qty	UOM	Basic (Rs)	Freight (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Supply of LT Feeder Monitoring Unit (FMU) consisting of 3 current transformers (for R, Y, B phases), 3 voltage sensors, without any electronic unit which will be installed on each LT feeder / overhead branch section as per technical specification.	697	Set					
2	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-1 Architecture capable of aggregating and transmitting data of up to 7 LT feeders as per specification	54	Set					
3	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-2 Architecture capable of aggregating and transmitting data of up to 14 LT feeders as per specification	42	Set					
4	Supply of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-3 Architecture capable of aggregating and transmitting data of up to 3 LT feeder overhead branch sections as per specification	50	Set					

ERECTION, TESTING & COMMISSIONING (ETC)

S.No	Item Description	Qty	UOM	Basic (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Installation, Testing, Commissioning and Integration of LT Feeder Monitoring Unit (FMU) consisting of 3 current transformers (for R, Y, B phases), 3 voltage sensors without electronic unit along with wired/wireless communication interface, mounting arrangement, wiring harness, conduits and all accessories required for monitoring one LT feeder / overhead branch section as per technical specification.	697	Lot				
2	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-1 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 7 LT feeders as per specification.	54	Lot				
3	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-2 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 14 LT feeders as per specification.	42	Lot				
4	Installation, Testing, Commissioning and Integration of IoT Gateway and electronic unit of FMU (if applicable) along with IP-65 enclosure – Type-3 Architecture along with related mounting arrangement, wiring, conduiting and other accessories for aggregating and transmitting data of up to 3 LT feeder overhead branch sections as per specification.	50	Lot				

ANNUAL MAINTENANCE CONTRACT (AMC)

S.No	Item Description	Qty	UOM	Basic (Rs)	GST (Rs)	Unit Landed (Rs)	Total Landed Cost (Rs)
1	Comprehensive Annual Operation & Maintenance Contract (AMC) for the entire IoT-enabled LT Feeder Monitoring System for 5 years from date of commissioning, including preventive maintenance, troubleshooting, firmware upgrades, replacement of faulty hardware, communication issue resolution and system health monitoring as per SLA defined in the specification.	20	Qtr				

Refer Technical Specifications for complete understanding of scope of work.

ANNEXURE-II

SLA PENALTY FRAMEWORK

IoT-Enabled LT Feeder Monitoring System

BSES Rajdhani Power Limited| Janakpuri Division

NIT No. CMC/BR/26-27/FK/PR/KG/1347

1. Purpose & scope

This Penalty Framework establishes structured financial consequences and escalation procedures for failures to meet the Service Level Agreements (SLAs) defined in Annexure C of the Technical Specification (Vol. III) for the IoT-Enabled LT Feeder Monitoring System tendered by BSES Rajdhani Power Limited.

The framework applies exclusively during the 5-year Comprehensive Annual Maintenance Contract (AMC) period commencing from the date of commissioning and is binding on the successful contractor throughout the AMC duration (GCC Clause 7.1 of Technical Specification; GCC Clause 36.3).

1.1 Governing NIT references

- Annexure C — Performance Requirements (Technical Specification, Volume III)
- GCC Clause 7.1–7.5 — Comprehensive AMC & Service Level Agreement
- GCC Clause 36.3 — AMC Payment terms and SLA linkage
- GCC Clause 45 — Liquidated Damages
- GCC Clause 46 — Recoveries
- GCC Clause 54 — Events of Default
- GCC Clause 13 — Data & Cybersecurity obligations

2. SLA metrics — Annexure C summary

The following six performance metrics, as defined in Annexure C of the Technical Specification, form the basis of this penalty framework. All deductions are computed against the quarterly AMC invoice value.

Metric	Name	Contracted target	NIT reference	Measurement method
M1	**Data availability latency**	≥ 97% of data available within 1 minute of generation (end of each 15-min block)	Annexure C, Metric 1; Clause 5.6, 5.7	Network monitoring & system logs
M2	**Cybersecurity compliance**	100% compliance with Clause 5.8 (CEA/CERT-IN/NCIIPC guidelines)	Annexure C, Metric 2; Clause 5.8; GCC Clause 13	Annual VAPT by CERT-In empanelled agency; security audit
M3	**Measurement accuracy**	≤ 2% accuracy deviation from reference (R, Y, B phases)	Annexure C, Metric 3; Clause 5.1	Clamp meter / check meter with valid calibration certificate
M4	**Data completeness & timestamp alignment**	≤ 3% invalid/missing data records per device per month	Annexure C, Metric 4; Clause 5.7	System logs — completeness, timestamp alignment & consistency

Metric	Name	Contracted target	NIT reference	Measurement method
M6a	**Initial response time**	≤ 12 hours from intimation of complaint or non-communication	Annexure C, Metric 6; Clause 7.2	Monthly compliance report (vendor-prepared, BRPL-ratified)
M6b	**Issue resolution time**	≤ 24 hours for full resolution; spare TAT ≤ 24 hours	Annexure C, Metric 6; Clause 7.3	Monthly compliance report (vendor-prepared, BRPL-ratified)

Note: Metric 5 (system availability / device uptime) is referenced in the NIT scope but not separately quantified in Annexure C. It is captured within Metric 1 (data availability latency) and Metric 4 (data completeness) for penalty computation purposes.

3. Penalty matrix — per metric breach

Penalties are expressed as a percentage deduction from the quarterly AMC payment value. Deductions across all metrics are cumulative within a quarter, subject to the aggregate cap defined in Section 4.

Tier definitions:

- **Tier 1 (Minor breach):** Performance falls marginally below target. Warning issued; deduction applied at the lower rate.
- **Tier 2 (Moderate breach):** Performance materially below target or repeated Tier 1 in same metric. Higher deduction; formal notice triggered.
- **Tier 3 (Severe breach):** Significant or systemic failure. Maximum deduction; escalation ladder triggered.

SLA metric	Target	Tier 1 — Minor breach Penalty: deduction of quarterly AMC	Tier 2 — Moderate breach Penalty: deduction of quarterly AMC	Tier 3 — Severe breach Penalty: deduction of quarterly AMC	Quarterly cap per metric
M1	≥ 97% data within 1 min	94–96.9% availability **→ 3% deduction**	90–93.9% availability **→ 7% deduction**	< 90% availability **→ 15% deduction**	20% of quarterly AMC value
M2	100% compliance; annual VAPT pass	Minor/non-critical VAPT finding(s); remediated within 30 days **→ 5% deduction**	Critical VAPT finding(s); remediated within 15 days **→ 10% deduction**	Unresolved critical finding(s) or confirmed security/data breach **→ 25% deduction + written cure notice**	25% of quarterly AMC value (breach incidents escalated separately)
M3	≤ 2% deviation per device	2–3% deviation (isolated device) **→ 2% deduction**	3–5% deviation or multiple devices **→ 5% deduction + mandatory recalibration**	> 5% deviation or systemic across fleet **→ 12% deduction + replacement at vendor cost**	15% of quarterly AMC value
M4	≤ 3% invalid/missing records per device/month	3–5% loss rate/device/month **→ 3% deduction**	5–10% loss rate **→ 8% deduction**	> 10% loss rate OR recurring for 2+ consecutive months **→ 15% deduction**	20% of quarterly AMC value
M6a	≤ 12 hrs initial response	12–18 hrs (≤ 3 incidents/quarter) **→ 1% per incident**	18–36 hrs OR > 3 incidents/quarter **→ 3% per incident**	> 36 hrs OR no response on any incident	10% of quarterly AMC value

SLA metric	Target	Tier 1 — Minor breach Penalty: deduction of quarterly AMC	Tier 2 — Moderate breach Penalty: deduction of quarterly AMC	Tier 3 — Severe breach Penalty: deduction of quarterly AMC	Quarterly cap per metric
				→ 5% per incident	
M6b	≤ 24 hrs resolution; spares TAT ≤ 24 hrs	24–36 hrs resolution (≤ 3 incidents/quarter) → 1% per incident	36–72 hrs OR > 3 incidents/quarter → 3% per incident	> 72 hrs OR device non-functional > 72 hrs → 5% per incident	10% of quarterly AMC value

4. Aggregate caps & payment withholding

To ensure proportionality and commercial viability while maintaining accountability, the following aggregate limits apply to SLA-related deductions:

Cap type	Limit	Basis & notes
Per-metric quarterly cap	**Ranges from 10%–25%**	Each metric has an individual cap set to prevent disproportionate single-metric deductions. See Penalty Matrix table for per-metric caps.
Combined quarterly penalty ceiling	**Maximum 30% of quarterly AMC value**	Total deductions across all metrics in any single quarter shall not exceed 30% of the quarterly AMC invoice value. Amount deducted per GCC Clause 45.4 and 46.1.
Annual cumulative penalty cap	**Maximum 10% of annual AMC value**	Aligned with GCC Clause 45.2.1 overall LD cap principle. Beyond this cap, escalation to contract termination proceedings may be invoked per Clause 45.2.3.
Full payment withholding	**When SLA not achieved (any metric)**	Per Clause 36.3, quarterly AMC payment is released only upon EIC certification of SLA compliance. Non-achievement permits BRPL to withhold full quarterly payment pending rectification.

5. Escalation Matrix— repeated or accumulated failures

Repeated SLA failures trigger a structured escalation process independent of per-quarter deductions. Escalation levels are cumulative — a contractor who fails to remediate at Level 2 automatically escalates to Level 3.

Level	Trigger condition	Consequences & actions	NIT reference
Level 1	Any Tier 2 breach in any metric — OR — 2 consecutive quarters with Tier 1 breach in the same metric	Written notice by BRPL EIC. Deductions applied. Vendor submits root cause analysis and corrective action plan within 15 days.	GCC Clause 7.4; Annexure C
Level 2	Any Tier 3 breach in any metric — OR — 2	Senior management review. Full quarterly payment withheld.	GCC Clause 36.3; Clause 35.1

Level	Trigger condition	Consequences & actions	NIT reference
	consecutive quarters with aggregate deductions > 15% of quarterly AMC	Vendor must submit an SLA Recovery Plan within 7 days and remediate within 30 days.	
Level 3	3 consecutive quarters with any deductions — OR — Unresolved Tier 3 cybersecurity breach	Formal cure notice under Clause 54 (Events of Default). Performance Bond (10% of total contract value) may be invoked. BRPL may partially withdraw work per Clause 43.7.	GCC Clause 54; Clause 30.01; Clause 43.7
Level 4	Failure to cure within notice period — OR — Total SLA deductions + LD reaching 10% of contract value	Termination for default per Clause 45.2.3 and Clause 54. BRPL entitled to invoke Performance Bond, recover differential vendor costs, and debar per Clause 31.01.	GCC Clause 45.2.3; Clause 54; Clause 31.01

6. Compliance reporting & verification cycle

SLA compliance is verified through a formal monthly and quarterly reporting cycle per GCC Clause 7.4. The following table defines the complete cycle:

#	Activity	Frequency	Description & obligation	NIT reference
01	**Monthly compliance report**	Monthly (within 5 days of month-end)	Vendor submits report against each SLA metric per Clause 7.4. BRPL representative ratifies or raises disputes within 7 days. Non-submission = deemed Tier 1 breach across all metrics.	Clause 7.4 of Technical Spec
02	**Quarterly AMC invoice submission**	At end of each quarter	Vendor submits invoice with filled EIC checklist per Clause 36.3. EIC certifies compliance before payment is processed.	GCC Clause 36.3
03	**Penalty computation & set-off**	Concurrent with quarterly invoice	BRPL computes deductions from 3 monthly reports. Penalty invoice raised per Clause 45.5 with GST. Net payment = AMC invoice minus penalty invoice.	GCC Clause 45.4, 45.5, 46.1
04	**Annual VAPT (M2 verification)**	Once per year per AMC year	VAPT conducted by CERT-In empanelled agency. Report shared with BRPL within 15 days. Findings determine M2 tier classification for that AMC year.	Annexure C, Metric 2; Clause 5.8
05	**Asset inventory update**	Start of each quarter	Vendor provides updated inventory of device make, model, firmware version, and SIM mapping per	Clause 5.8(g) of Technical Spec

#	Activity	Frequency	Description & obligation	NIT reference
			Clause 5.8g. Non-submission = deemed M2 non-compliance.	

7. Additional penalty provisions from GCC

7.1 Non-submission of monthly compliance report

Failure to submit the monthly SLA compliance report (GCC Clause 7.4) within 5 days of month-end shall be treated as a Tier 1 breach across all applicable metrics for that month. Deductions for non-submission shall be applied in addition to any underlying SLA breach deductions.

7.2 Safety non-compliance (GCC Clause 45.3)

A separate penalty of 2.5% of the bill amount is applicable per instance of non-compliance with safety practices and site cleanliness during AMC activities. This penalty is independent of SLA deductions and is not counted toward the combined quarterly or annual caps defined in Section 4.

7.3 Recovery mechanism (GCC Clause 46.1)

All penalty amounts are recoverable by BRPL through set-off from any payment due to the contractor — including supply, ETC, or AMC invoices — or from the Performance Bond. Recovery does not require separate legal proceedings or prior formal notice.

7.4 GST on penalty invoices (GCC Clause 45.5)

BRPL shall raise a penalty invoice inclusive of applicable GST rates per Clause 45.5. Net payment to the vendor will be computed after setting off the penalty invoice amount against the corresponding AMC invoice. Vendor is required to make timely GST filings to ensure BRPL's input tax credit is not affected.

7.5 Vendor dispute window

The vendor may dispute any penalty computation within 10 working days of receiving the BRPL penalty invoice by submitting written evidence from system logs, field maintenance records, or the ratified monthly compliance report. Disputes not raised within this window shall be deemed accepted. BRPL shall resolve disputes within 15 working days.

7.6 Cybersecurity breach — additional liability (GCC Clause 13.2)

In addition to the M2 SLA deduction, any confirmed data breach or cyber security incident must be promptly reported to BRPL and investigated at the contractor's expense. Clause 77.3 further provides that the contractor shall be liable for compensation or damages as determined by the competent authority of BRPL, over and above the SLA penalty framework caps.

8. Interaction with LD framework (supply & ETC phase)

This SLA Penalty Framework applies exclusively during the AMC phase. The supply and ETC phase is governed by the Liquidated Damages provisions in GCC Clause 45:

- **LD rate:** 0.5% of total price per week of delay (or pro-rata thereof) for both supply and ETC.
- **LD cap:** Maximum 10% of total contract value (GCC Clause 45.1.4 and 45.2.1).
- **LD vs SLA:** LD and SLA penalties operate independently. LD deductions during the supply/ETC phase do not reduce the AMC payment withholding headroom, and vice versa.
- **Termination threshold:** If total accumulated LD + SLA deductions reach 10% of the total contract value, BRPL may treat this as an Event of Default and invoke termination rights under Clause 45.2.3.

9. Key definitions

Term	Definition
AMC	Comprehensive Annual Maintenance Contract — 5-year period post commissioning (GCC Clause 7.1)
Quarterly AMC value	The basic value of one quarterly AMC invoice (total annual AMC value ÷ 4)
SLA deduction	Percentage withheld from quarterly AMC payment due to metric non-achievement
VAPT	Vulnerability Assessment & Penetration Testing — conducted by a CERT-In empanelled agency (Annexure C, Metric 2)
EIC	Engineer-in-Charge — BRPL officer responsible for certifying SLA compliance and AMC payments
MDCC	Material Dispatch Clearance Certificate — issued by BRPL prior to dispatch (applies to supply phase)
Intimation	Written or portal-based notification by BRPL to vendor of any complaint, non-communication, or defect
Remediation	Complete resolution of the SLA breach condition, verified and certified by BRPL EIC

ANNEXURE-III

S. No.	Clause Ref.	Description as per NIT	Query / Clarification Sought/ Submission	BRPL reply
1	Section 8.0 (Scope)	Turnkey scope incl. SITC, integration, AMC	Please clarify whether scope includes full Digital Platform (head-end, analytics, dashboards) or only field devices + integration with BRPL platform.	As per scope defined in tender NIT
2	Section 8.4	Implicit inclusion of all required items	Kindly define boundary of “deemed included scope” to avoid ambiguity in pricing and execution.	Work has to completed on single point responsibility basis. Refer Clause 17 of GCC for Pricing.
3	Tech Specs	Integration with BRPL Digital Platform	Please provide details of existing BRPL systems (SCADA/MDMS/ADMS/Data Lake) for integration.	Data and its protocol for integration with the MQTT broker and the BRPL digital twin platform are outlined in the technical specifications; further details will be provided during detailed engineering
4	General	Platform architecture	Who will own cloud infrastructure, storage, and application layers—BRPL or bidder?	As per scope defined in tender NIT. The MQTT broker and BRPL digital platform will be hosted by BRPL. Device Management Platform (DMP) shall be provided by the bidder. DMP shall manage firmware upgrade and configuration changes through OTA. BRPL will provide server/ cloud for hosting DMP, vendor need to ensure all security mechanism. Before full scale rollout of changes, bidder need to test firmware / configuration changes on limited number of devices and take approval from BRPL. BRPL reserves the right to audit the complete system anytime if required. DMP shall integrate with BRPL platform to provide status of changes and audit logs etc.
5	5.6.3a	API-based data access	Are API standards (data model/schema) predefined by BRPL? If yes, please share specifications.	Yes, it will be shared after the award.
6	5.6.3a	Push/Pull data mechanisms	What are expected latency and data availability SLAs beyond 15-minute intervals?	Please refer annexure C
7	General	Data ownership	Clarify ownership of raw data, processed data, and analytics outputs.	All data shall be property of BRPL
8	General	Integration	Will bidder be required to integrate with multiple systems or a single unified platform?	Refer Annexure C
9	Tech Specs	Communication architecture	Please confirm preferred communication medium (4G/NB-IoT/RF Mesh).	As per technical spec Cl no 5.4 (Modem to support cellular network (5G, 4G) for establishing connectivity with BRPL Digital Platform or any authorized party)
10	5.6	SIM failure responsibility	Please clarify SLA responsibilities for telecom-related failures beyond vendor control.	Shall be in BRPL scope
11	Payment Terms (AMC)	SLA-linked AMC payment	Please share detailed SLA definitions and penalty structure.	Attached as Annexure-II
12	General	Uptime requirements	Define uptime requirements for devices, communication, and platform separately.	Uptime of devices / items as per scope defined in technical spec shall be such that it meets SLA defined in annexure C of technical spec.
13	5.8	Compliance with CEA/CERT-IN/NCIIPC	Will third-party cyber security audits be required? If yes, who will bear the cost?	Refer annexure C of tech spec. Bidder to bear the cost.

14	Clause 13 (GCC)	Cyber security obligations	Is on-perm deployment mandatory for compliance?	On-perm deployment is not mandatory. NIT requirement shall be meet.
15	Clause 13	Vulnerability management (36 months)	Please clarify scope of patching and support obligations beyond AMC period.	To be revised from 36 months to the AMC period (60 months). Beyond the AMC period, it shall be on a mutually agreed basis.
16	General	Data security	Are there specific data residency or localization requirements?	Data must go directly from gateway to MQTT broker & BRPL Digital platform hosted by BRPL as technical spec. So ,data residency or localization not applicable.
17	5.7	15-minute time alignment requirement	What is acceptable time drift tolerance?	Please refer Cl no 8.7 (b) of technical spec.(Timestamp deviation shall not exceed ±1 second and the data latency between device and Digitization platform shall be within acceptable limits.) Drift in time synchronization clock wrt NPL shall not be more than ±5minutes/ year at a reference temperature of 27°C.
18	General	Data validation	How will compliance with timestamp accuracy be verified?	It shall be verified during FAT through computerise load bank time sync with NPL. If the same test facility is not available with bidder then same can be carried out by third NABL acetated lab /DERC recommended lab without price implication to BRPL.
19	Annexure 2.06	Payment terms	What constitutes “successful integration” for release of final 25% payment?	Successful integration' implies complete integration of all field devices with BRPL's Digital Platform and certification by Engineer-in-Charge.
20	Annexure 2.06	Payment timeline	Is milestone-based payment possible instead of end-loaded structure?	No Deviation. As per Tender only
21	General	GST clause	Clarify handling of input tax credit rejections due to systemic issues.	As per Clauses 29.1 to 29.6 of GCC, GST is payable on actuals and is included in the contract price. If a contractor fails to file GSTR-1/GSTR-3B resulting in BRPL being unable to claim input tax credit, BRPL reserves the right to withhold 100% of the GST amount from subsequent payments (Clause 29.4). BRPL may also recover financial losses including tax, interest, and penalties from the contractor (Clause 29.6).
22	General	Price firmness	In case of long execution timelines, is any escalation mechanism allowed?	As per Clause 28.1.1 of GCC and Clause 4.04, the contract price/rates shall remain firm for the entire duration of the contract and are not subject to any variation or escalation for any reason whatsoever. No escalation mechanism is provided, even in case of long execution timelines. However, any new taxes/duties levied by the government during the contract term shall be borne by BRPL (Clause 29.1).
23	Reverse Auction Clause	Pricing	Will there be any floor price or protection against unviable bids?	All techno-commercially qualified bidders shall participate in Reverse Auction. No such mechanism is available in Reverse Auction process.

24	Clause 4.01	Award decision	How will technical differentiation be factored vs. L1 selection?	As per Clause 4.01, the award decision is based on the lowest bid (L1) on delivered cost competitiveness, along with delivery schedule, conformance to qualifying criteria, and deviations from bidding documents (Clause 24.03). Technical differentiation is factored in during the techno-commercial evaluation stage only. Financial award is purely on L1 basis. BRPL reserves the right to distribute quantities or award to multiple bidders at its discretion.
25	Clause 8.4	Implicit scope inclusion	Will change orders be allowed for additional scope identified during execution?	Refer Clause 17 Quantity Variations, Extra Items/Worksof GCC
26	Clause 4.02	Default penalty	Clarify applicability and cap on differential payment liability.	As per Clause 4.02, in the event of a selected bidder's default on its bid, the bidder is required to pay BRPL an amount equal to the difference between its bid and the next lowest bid on the quantity declared in the NIT/RFQ. The NIT does not specify a cap on this differential payment liability beyond this definition.
27	Clause 4.05	Quantity variation	What is the permissible range of quantity variation?	As per Clause 4.05, the Purchaser reserves the right to vary the quantity based on actual requirements. Clause 28.01 of GCC also states that BRPL may increase or decrease quantities without any change in terms and conditions during execution. No specific percentage range for variation is defined in the NIT.
28	Clause 11	Price validity	What happens in case of project delays beyond bidder control?	As per Clause 27.1 and 4.04 of GCC, the agreed prices shall remain fixed and valid throughout the entire duration of the contract until completion. No price escalation is provided. In case of delays beyond the bidder's control, the bidder may seek an Extension of Time (Clause 44.1), but no price increase shall be warranted. Any such extension does not entitle the contractor to additional cost.
29	General	Manpower	Expected onsite manpower and skill requirements?	It should be suitable to meet NIT requirement.
30	General	Training	Scope and duration of training to BRPL personnel?	Onsite training at the BRPL facility/substation will be required, covering system architecture, device installation, troubleshooting, operation, monitoring, maintenance, and any other necessary skills. 5 man-day training shall be provided by bidder.
31	Clause 8.7	Digital documentation	What are expected reporting formats and frequency?	Will be finalized post award.
32	2.02 Commercial Criteria	The Award Value shall not exceed Contractor’s Turnover in last financial year.	Award Value should be as per bidders capability to execute the project and independent of Turnover	No Deviation. As per Tender only. BRPL reserves all rights to award based on turnover, execution capabilities, and past performance at its

33	43.1. Project Completion Timelines	The contractual delivery for the Goods or Services shall be 60 days from the date of LOI/PO.	The Delivery timelines for supply should be at least 90 days as the manufacturing of quality products takes time and 60 days is a very tight timeline. Also the timelines for Installation shall be dependent on Shutdown Schedule which should be taken into account which is beyond bidders control	No Deviation. As per Tender only Bidders are advised to note that extension of time may be granted at BRPL's discretion for delays not attributable to the contractor (Clause 44.1), subject to detailed justification within 10 days of the delay. Installation shutdown scheduling should be addressed in the Contractor's project plan submitted within 5 days of LOI (Clause 43.2).
34	36. Terms of Payment and Milestones	36.1. For Supply of Equipment and Materials: i. 75% of the basic value with 100% taxes and duties shall be made within 45 days from the date of receipt & acceptance of material at store/site on against submission of following documents against dispatch of each consignment at our Vendor Support Cell (VSC): ii. Balance of 25% of basic value shall be paid in 45 days from the date of successful testing, commissioning, integration and handing over of the entire installation duly certified by BRPL Engineer-in-Charge. 36.2. For Erection, Installation and Testing & Commissioning (ETC): i. 90% pro-rata of total services value shall be payable against R/A bills payable within 45 days after completion duly certified by Engineer in charge.	There should be a timeline to release the 25% payment in case of any delay from BRPL for successful testing, commissioning & integration or beyond bidder's control.	Request may be considered based on the merit of the Vendor's request subject completion of all works including punch points by vendor
35	61.2.	While carrying out any civil work including road/ pit digging, plinth/ fence making, road restoration	Please clarify the responsibility of civil work involved.	The mounting arrangement shall be as per the specifications 5.5 and within the bidder’s scope. If any civil work is required in bidder's mounting arrangement design, then it will be in bidder's scope along with required manpower and other resources to do execution.
36	2.01 ISO	The bidder must possess valid ISO 9001:2015 certification or above.	If the bidder is OEM/ODM but doesn't not have ISO, Please allow the certificates of contract manufacturer (i.e. Device assembler, Harness Manufacturer, PCB assembler / Fabricator etc.)	Noted
37	38 . Defects Liability Period/ Warranty / Guarantee	The Defect Liability Period shall be Sixty (60) months from the date of Final Takeover of Packages by the Purchaser	The warranty terms should be calculated from date of supply as the final takeover is not in the bidder's control due to shutdown involved in the installation process	No deviation. As per tender only

S. No.	Tender Page No.	Clause No.	Existing Tender Requirement / Clause	Query / Clarification Required	Probus Suggested Interpretation / Amendment	BRPL reply
1	Page 93	Point 5	Supply: i. 75% of the basic value with 100% taxes and duties shall be made within 45 days from the date of receipt & acceptance of material at store/site ii. Balance 25% of value shall be paid in 45 days from the date of successful testing, commissioning, integration and handing over of the entire installation duly certified by BRPL E-I_C.	-	Payment Terms should be modified to 90% one-time and 10% within 45 days as we are MSMEs	No deviation. As per Tender
2	Page 93	Point 6	60 days from the date of LOI/PO	-	The scope of the project is large and would require atleat 120 days for completion. Please provide the same.	No deviation. As per tender
3	Page 93	Point 8	Supply: 0.5% (half percent) of the total price for every week of delay or part thereof for undelivered units subject to maximum of 10% of total contract value ETC: At the rate of 0.5% of the total contract price per each week of delay or pro-rate thereof, by which the completion is delayed. Max LD of delay is 10% of contract value.	-	LD Terms are stringent and should be modified as per standard terms to - 0.1% every week to a maximum of 1%	No deviation. As per tender
4	-	-	Volume II - Financial Bid (Price Format) Supply of IoT Gateway – 1) Type-1 Architecture capable of aggregating data from up to 7 LT FMUs 2) Type-2 Architecture capable of aggregating data from up to 14 LT FMUs 3) Type-3 Architecture capable of aggregating data from up to 3 LT FMUs	-	The BoQ Currently has 3 type of gateways. It should be made for field devices and Gateways only. This should be made simple for accommodating all bidders and not for any one bidder. It should be the prerogative of the bidders to quantify the gateways as per it's functionalities by every bidder.	Refer Annexure-I of Corrigendum. In order to incorporate different type of solutions offered by bidders under the ambit of specification, following flexibility has been added as corrigendum and updated in the revised BOQ attached. - All electronic devices of FMU and IOT Gateway has been clubbed into a "Set" for each type of architecture (Type-1, 2, & 3) so that number and type of constituent electronic units may be optimally designed by the bidders. - But, number of sim per substation shall not exceed two, - Smart meter can also be used as electronic device
5	Page 129	5.6.2 - C	c. The IoT gateway shall support local data buffering and storeand-forward to ensure no data loss during WAN outages, while preserving original timestamps.	Please clarify how much slots/records needs to be saved ?	-	1 day 96 sltos
6	Page 143	Table 2 - Point B	-	Please clarify if this is a hardware alert or server based logic?	If the communication failure happens, Hardware will not be able to share any communication failure alert. Hence it is suggested that the alert should be generated on server based logic.	Bidder shall locally store events with timestamps, and during data transmission interruptions, buffer the data and send it once communication is re-established (instead of sending continuously)

Sl. NO.	Clause No.	Clause, as it exists in Technical Specifications	CLAUSE, AS IT SHOULD READ AFTER INCORPORATION OF COMMENTS/ SUGGESTION IN THE TECHNICAL SPECIFICATIONS	Comments/ Suggestion	BRPL response
1	5.0 Technical Parameters, 5.3 Auxiliary Power Suply, Page no 127 of 146	5.3 Auxiliary Power Supply b) LT supply at LT bus bar would be 230 V AC +/- 6%	5.3 Auxiliary Power Supply b) Type 2 Pluggable Surge Protection Device in accordance with IEC 61643 with KEMA & UL approval must be installed at the incoming power supply of IoT Gateway. LT supply at LT bus bar would be 30VAC +/-6%. DIN Rail Mounted Suitable Surge Protection must be installed on all communication lines (i.e on Ethernet/RS 485 lines)	Substations are prone to lightning and switching surges which generally burn the electrical/electonics devices since they are prone to surges, BSES (BRPL) extensively uses Surge Protection Devices (SPDs) with FRTU and RTU in RMU and Substation. We recommend that at incoming power supply of IoT gateway, Type 2 SPD shall be installed which shall be pluggable and can be monitored through remotely. These SPDs shall be in line with IEC 61643 with KEMA & UL approval. For Reference kindly find Annexure A with RMU specification	Adequate Surge Protection Devices (SPDs) shall be installed at incoming power supply of IoT gateway and FMU in order to protect from lightning and switching surges. It is indirectly indicated in clause 5.2.2 (f) and 8.5 (b) of Technical Specification.
2	5.0 Technical Parameters, 5.5 Mounting Arrangement & Enclosure, Page no 127 of 146	5.5 Mounting Arrangement & Enclosure d) All units and sensors shall be suitable to use outdoor. IP 65 enclosure shall be used to house any electronic circuitry.	5.5 Mounting Arrangement & Enclosure d) All units and sensors shall be suitable to use outdoor. IP 65 enclosure shall be used to house any electronic circuitry. To ease installation and maintenance work, All enclosure shall be provided with Plugable Heavy Duty Connector instead of Gland Arrangement	To prevent Panel from entry of Rodent, Heavy duty modular connectors or Stainless Steel Gland arrangement is adviced. Also, Heavy Duty Connector shall be of Plug in type connector which will ease maintenance and better reliability for cable termination. Plastic glands can be easiliy damaged by rodents and safety of system can be comprised. For Reference kindly find Annexure B as tenders/specfication of RTU Panel in T&D Energy Sector	Suitable gland / connector shall be provided on the enclosure to ensure compliance to IP65 requirements.
3	5.0 Technical Parameters, 5.5 Mounting Arrangement & Enclosure, Page no 127 of 146	5.5 Mounting Arrangement & Enclosure d) All units and sensors shall be suitable to use outdoor. IP 65 enclosure shall be used to house any electronic circuitry.	5.5 Mounting Arrangement & Enclosure d) All internal wiring are to be connected to external equipment shall terminate on terminal blocks. The terminals shall be Screw/push-in type allowing direct termination of wire without any tool.	For ease of maintenance and better reliablity we suggest to use Push in type Terminal blocks in Panel where no specical tool is required for termination. Push-in TBs maintain constant spring pressure, offering superior vibration resistance and long-term stability.	Bidder may use suitable terminal block arrangement to meet specification requirement. Better product will reduce AMC cost.
4	5.0 Technical Parameters, 5.8 Cyber Security, Page no 131 of 146	5.8 Cyber Security Feature like inbuilt firewall with RBAC is missing	5.8 Cyber Security IOT device shall have in built firewall suppproting at least Roll based Access Control (RBAC), whitelisting and blacklisting of IPs. Also, IoT device shall have provision to store logs such as syslog and shall be build and design as per IEC 62443-4-1 and certified as per IEC 62443-4-2.	With Integrated Firewall, it will make simplified architecture with no seprate device to configure and it will improve OT protcol protection with high reliabilty, lower latency and less complexity for remote sites. Separate firewalls may not properly handle OT protocols, may introduce latency, or even break polling cycles. Also, IEC 62443 Standard is globally accpeted standard for cybersecurity of Product, we suggest that IoT device shall be designed as per IEC 62443-4-2 and shall be certified with reputed 3rd party agency like TuV, Exida, IEC etc	The system offered under this RFP shall comply to clause 5.8 (Cyber Security) of Technical Specification. As per Annexure-C sl. no. 2 of Technical Specification, "Compliance shall be verified through an annual security audit and Vulnerability Assessment & Penetration Testing (VAPT) conducted through a CERT-In empanelled agency." It would be bidder's responsibility to ensure compliance through a CERT-In empanelled agency to meet the SLA requirements.

S. No.	Bidder's Query / Clarification / Suggested Amendment	BRPL reply
1	1. Details of No. of Feeders, T Joints & Shackling Joints per Substation	Refer revised BOQ
2	2. Cable size of 4Cx300 Sq. mm is common for all feeders	Maximum cable size of LT feeder shall be 4Cx400 sqmm XLPE cable.
3	3. FMU box is IP56 or IP65 as both are mentioned in tender.	IP65. Refer revised BOQ
4	4. Size of AB cable on poles.	4Cx150 sqmm LT AB cable / overhead conductor
5	5. Mounting of structure on poles required arrangement of Lifter to be arranged by whom.	Bidder
6	6. Pls. specify CT ratio & class.	Mentioned in specification (400/x, Class 1)
7	7. Civil work for structure & supply / laying of conduits in whose scope.	The mounting arrangement shall be as per the specifications 5.5 and within the bidder's scope. If any civil work is required in bidder's mounting arrangement design, then it will be in bidder's scope along with required manpower and other resources to do execution.
8	8. Pls. specify communication protocol for data transfer.	MQTT and API. Refer Specification
9	9. Power supply during structure welding to be arranged by BYPL.	Can be tapped from ACB's LT Bus. Shutdown would be provided by BRPL.
10	10. How much Shutdown time per feeder will be provided.	Maximum 1 Hr to 1.5 Hrs cumulative shutdown time per Distribution Transformer will be provided for erection, testing, commissioning & integration. Sufficient manpower, motorized tools & tackles, etc shall be arranged in order to meet these timelines.
11	11. For such a huge quality of feeders, 60 days' time is not sufficient to complete the entire job.	No Deviation. As per Tender only Bidders are advised to note that extension of time may be granted at BRPL's discretion for delays not attributable to the contractor (Clause 44.1), subject to detailed justification within 10 days of the delay. Installation shutdown scheduling should be addressed in the

S. No.	Tender Page No.	Clause No.	Existing Tender Requirement / Clause	Bidder's Query / Clarification / Suggested Amendment	BRPL reply
1	Page 129 of 146	5.6.2 e	SIM (Whitelisted, Fax/Data mode) (4G/5G) cards shall be provided by BRPL. Vendor shall perform device binding of SIM cards. The vendor shall ensure proper configuration, integration and testing of the IoT gateway communication module with the BRPL-provided SIM for reliable communication with the BRPL Digital platform or any authorized party.	Can we install the IoT Controllers in each feeder panel and transmit data directly to the server without needing an IoT gateway. Each device will have a SIM Card and send the data directly to the server. This approach provides the following advantages: 1. Reduces the risk of loss of communication since now, Gateway failure which leads to loss of communication with all units in the substation doesnt happen. 2. With the costs of the SIM cards in India, cost of Gateway may be more than the Cost of SIMs for 5 yrs. 3. With a single model device, O&M would be easy during the five-year SLA period. Without the need for diluting any other technical requirements and SLA conditions, we request that you amend the NIT BOQ Section to allow provision for a solution with a SIM-based device in each feeder, which obviates the need for a Gateway.	Refer Annexure-I of Corrigendum. In order to incorporate different type of solutions offered by bidders under the ambit of specification, following flexibility has been added as corrigendum and updated in the revised BOQ attached. - All electronic devices of FMU and IOT Gateway has been clubbed into a "Set" for each type of architecture (Type-1, 2, & 3) so that number and type of constituent electronic units may be optimally designed by the bidders. - But, number of sim per substation shall not exceed two, - Smart meter can also be used as electronic device
2	Page 144 of 146	Annexure-E	Architecture		
3	Page 99 to 118 of 146	Price Bid	BOQ		

S. No.	Tender Page No.	Clause No.	Existing Tender Requirement / Clause	Bidder's Query / Clarification / Suggested Amendment	BRPL reply
1			General	We propose a Technology Agnostic Solution to install DT meters at eachtransformer (ACBs) within the distribution substations, along with smartmodems at every pole location, as an alternative to FMUs and IoT Gateways specified in the RFP. We kindly request you to provide the exact number of DT ACBs for DT meter installation and the total number of pole locations for smart modems. This information isessential for us to accurately finalize the BOQ for DT meters and smartmodems while ensuring the deployment of advanced technology.	In order to incorporate different type of solutions offered by bidders under the ambit of specification, following flexibility has been added as corrigendum and updated in the revised BOQ attached. - All electronic devices of FMU and IOT Gateway has been clubbed into a "Set" for each type of architecture (Type-1, 2, & 3) so that number and type of constituent electronic units may be optimally designed by the bidders. - But, number of sim per substation shall not exceed

S. No.	Bidder's Query / Clarification / Suggested Amendment	
		BRPL reply
1	We have an FMU which can read 4 feeders as it has 16 current inputs. This FMU is connected to our IOT gateway via RS485 and one IOT gateway can read 4 FMUs (or more). Based on the 5 schemes, I have created a BOQ. I wanted to confirm from you if our understanding of the scheme is correct.	Refer Annexure-I of Corrigendum. In order to incorporate different type of solutions offered by bidders under the ambit of specification, following flexibility has been added as corrigendum and updated in the revised BOQ attached. - All electronic devices of FMU and IOT Gateway has been clubbed into a "Set" for each type of architecture (Type-1, 2, & 3) so that number and type of constituent electronic units may be optimally designed by the bidders. - But, number of sim per substation shall not exceed two, - Smart meter can also be used as electronic device

Sr#	Area	Support Seeked	BRPL reply
1	QUALIFICATION CRITERIA 1.0 OEM/EPC- An EPC Contractor having experience in integration of field monitoring devices with a central monitoring platform / SCADA / IoT platform / cloud platform	. 1.Experpicne on implementing integration with scada in on premise /hybrid model,As we have done implementation at Karnataka	No Deviation Allowed. As per Tender only
2	QUALIFICATION CRITERIA 2.- Experience The bidder/OEM shall have successfully supplied and commissioned at least one IOT-based electrical monitoring systems such as feeder monitoring, transformer monitoring, substation monitoring, or similar smart grid / IoT monitoring systems during the last five (5) years in utility/SEB/PSU/Govt. organization. Please furnish list of customers & projects	Experience - consider experience from utility (gas/power) and include Station We have deployed our IOT devices for Oil& Gas station automation at Rajasthan State Las Limited (RSGL) for kota city with the similar frequency of data transfer as required for RFP	No Deviation Allowed. As per Tender only
3	QUALIFICATION CRITERIA 3.0.- Performance certificate The bidder/OEM shall have at least one performance certificate for Supply & ITC of similar project and such project shall be in successful operation for a minimum period of one (1) year as on the date of bid submission	Performance certificate – project which are completed in last one year and in operation, having completion certificate We have couple of engagement (Karnataka & Rajasthan) which have gone LIVE but have not completed 1 year	No Deviation Allowed. As per Tender only
4	EMD	You have requested for bidder to have MSME udyam/udyog adhar. We being start up, have MSME certificate & start up certificate. Such project as envaisgged in innovagive in nature andnurturing innovation aligned ot BRPL quality policy Request for those MSME vendor having start up DIPP registration , to be exempted from EMD	No Deviation Allowed. As per Tender only
FMU Hardware			
1	FMU Hardware CT type — split-core or solid-core	Does BRPL require split-core (clip-on, no cable cutting) or solid-core CTs? This significantly impacts installation complexity and cost at live feeders	Both can be used as per OEM design
2	FMU Hardware CT primary rating	Is a single CT ratio sufficient for all feeders, or are multiple CT ratios needed based on feeder load profiles across sub-divisions?	Single CT ratio: 400/X
3	FMU power supply	How is the FMU powered? Self-powered from the LT feeder (CT burden / VT tap), or does each installation point require a separate 230V AC supply?	Can tap aux supply from LT bus bar of ACB or through self powered mechanism (CT burden / VT tap)
4	FMU Hardware Enclosure rating discrepancy	BOQ mentions IP-56 but standard outdoor practice requires IP65. Which is the actual minimum acceptable rating?	IP65, BOQ revised and attached
Communication & Network			
5	Communication & Network RS-485 cable length limit	What is the maximum permitted RS-485 distance between FMU and gateway? Field feeders can be spread across hundreds of meters	25m (approx.)
6	Communication & Network	The tender document **does not specify exact distances** between FMUs and their	25m (max approx.)

	FMU-to-Gateway	gateway. Can we plan LAN for short distances and wireless network for long	
7	Communication & Network MQTT topic structure and JSON schema	Will BRPL share a draft topic tree and JSON field definitions before FAT, or only after contract award?	Finalised during detailed engineering after award
8	Communication & Network BRPL MQTT broker endpoint	When will IP address, port, and TLS certificate details for BRPL's broker be shared with the vendor?	During detailed engineering after award
Gateway Design			
9	**Gateway power supply**	Is 230V AC available at every gateway installation point, or must the gateway support DC supply or battery backup?	As per Cl. 5.5 of technical specification. Aux. Power supply for IoT gateway at LT feeder monitoring unit (if applicable) shall be tap from LT bus bar through proper adequate size of thimble. 230V AC is available at each substation.
10	**Gateway enclosure mounting**	Should the gateway be wall-mount, pole-mount, or panel-mount? Can BRPL provide site photographs or installation drawings?	As per Cl. 5.5 of technical specification for mounting arrangement
11	**SIM provisioning timeline**	When will BRPL provide the whitelisted SIMs? How should vendors handle integration testing before SIMs are available?	SIMs will be provided after awafrd before testing
12	**Dual SIM / failover**	Is a secondary SIM slot or network failover required if the primary 4G link is unavailable beyond the buffering period?	Not envisaged in the specification
Data & Platform Integration			
13	**BRPL Digital Platform API documentation**	Will BRPL share API specifications, endpoint URLs, and integration guide before FAT? Without this, integration cannot be planned	Finalised during detailed engineering after award
14	**Store-and-forward buffer size**	What is the minimum number of days of data the gateway must buffer during prolonged cellular outages?	One day (96 slots) as per spec
15	**Configurable event definitions**	What is the mechanism for adding new event types in future — remote configuration push, firmware OTA, or manual parameter change?	Device Management Platform (DMP) shall be provided by the bidder. DMP shall manage firmware upgrade and configuration changes through OTA. BRPL will provide server/ cloud for hosting DMP, vendor need to ensure all security mechanism. Before full scale rollout of changes, bidder need to test firmware / configuration changes on limited number of devices and take approval from BRPL. BRPL reserves the right to audit the complete system anytime if required. DMP shall integrate with BRPL platform to provide status of changes and audit logs etc.
16	**Data backfill after outage**	After cellular connectivity restores, should buffered historical data be pushed chronologically or latest-first? Is there a rate limit on backfill uploads?	Buffered event data shall be pushed latest first and buffered measurand data shall be pushed chronologically. Every data shall be pushed alongwith timestamp.
Testing & Acceptance			
17	**FAT location and procedure**	Will FAT be conducted at the vendor's factory or at BRPL's Delhi premises?	Vendor shall arrange to conduct all the tests at either vendor's factory or 3rd party NABL accredited lab
18	**Pilot PoC acceptance criteria**	What are the exact acceptance thresholds for the 3 FMU + gateway pilot in terms of data accuracy, uptime duration, and integration validation?	As mentioned in specification
19	**NABL calibration lab**	Must calibration be done at a BRPL-approved specific lab, or is any NABL-accredited lab in India acceptable?	NABL-accredited lab in India is acceptable
AMC & Long-Term			
20	**Firmware OTA mechanism**	Is OTA pushed from BRPL's platform or from the vendor's own device management system? Who controls the OTA trigger?	Device Management Platform (DMP) shall be provided by the bidder. DMP shall manage firmware upgrade and configuration changes through OTA. BRPL will provide server/ cloud for hosting DMP, vendor need to ensure all security mechanism. Before full scale rollout of changes, bidder need to test firmware / configuration changes on limited number of devices and take approval from BRPL. BRPL reserves the right to audit the complete system anytime if required. DMP shall integrate with BRPL platform to provide status of changes and audit logs etc.
21	**Spare parts stocking requirement**	What minimum spare parts inventory must be maintained at the Delhi NCR service center throughout the AMC period?	Sufficient enough to meet SLA requirement as per Annexure-C

22	**SLA measurement tool**	Will the 97% data availability SLA be measured from BRPL's platform logs or from vendor-submitted reports? How will SLA deduction disputes be resolved?	Shall be measured through vendor submitted reports and verified from BRPL's platform logs. In case of disputes, BRPL's decision will final and binding.
Statutory & Compliance			
23	**CEI clearance applicability**	The phrase **"if applicable"** is the ambiguity — it is unclear under what conditions CEI clearance is or is not required	Self Safety Certification to be proposed by vendor. BRPL's Safety & Quality Officer will give clearance.
24	**Make in India local content percentage**	What is the minimum local content percentage required for the IoT hardware to qualify under the MII policy?	PI refer Relevant Government policy on the same

Sr. No.	NIT Section No. and Clause No.	Page No.	Query	BRPL reply
1	Technical Specification For IOT-Enabled Low Tension (LT) Feeder Monitoring System # 3.0 System Parameters S. No. 3.4.2	124	Given that the specified requirement of 0–96% RH with condensing conditions will increase costs (estimated up to INR 2000 per meter), can the humidity requirement be relaxed to up to **85% RH under non-condensing conditions**? Appropriate mitigation measures such as silica gel, breather drains and similar solutions can be provided within the enclosure to manage moisture and prevent adverse effects.	As per technical specification
2	GENERAL CONDITIONS OF CONTRACT (GCC) # 43. Project Completion Timelines	63	Can BRPL consider revising the stipulated **60-day completion timeline** to a more realistic **90–120 days**, given the turnkey scope involving sequential activities, approval dependencies, external statutory clearances and the need for solution customization for varying counts of energy meters per communication module—covering design, development, testing and implementation? **Week 0-1:** LOI/PO issuance, kickoff meeting, project mobilization, site-wise planning, manpower plan and execution schedule for BRPL review, since manufacturing can proceed only after document approval and manufacturing clearance **Week 2-3:** BRPL review/approval cycle. The tender itself allows multiple approval/resubmission cycles, which creates a front-end dependency before production can start **Week 4–8:** Procurement of components, manufacturing, quality checks, factory testing and inspection readiness. Dispatch can happen only after inspection clearance / MDCC **Week 9–10:** Dispatch, logistics, unloading at site/store, material verification, site readiness checks and installation preparation. Responsibility for storage, handling, protection and site readiness on the bidder **Week 10–13**: Erection, installation, integration, feeder mapping, pre-commissioning checks and field correction. This depends on actual site conditions **Week 14–15**: Commissioning, reliability validation, documentation, statutory / Electrical Inspector clearance. These are external dependencies **Week 16–17**: Final handover, submission of drawings, test certificates, O&M documents, training and acceptance	No Deviation. As per Tender only Bidders are advised to note that extension of time may be granted at BRPL's discretion for delays not attributable to the contractor (Clause 44.1), subject to detailed justification within 10 days of the delay. Installation shutdown scheduling should be addressed in the Contractor's project plan submitted within 5 days of LOI (Clause 43.2).
3	Technical Specification For IOT-Enabled Low Tension (LT) Feeder Monitoring System # 8.4 Type tests	134	Can BRPL consider relaxing the Pre-bid Type Test Requirement by accepting **Performance Certificate** of Bidders who have done a PoC with them for IoT-based systems?	As per technical specification
4	2.02 Commercial Criteria #9 Statutory Documents	7	What do we mean by "**other statutory compliances**"? Can BRPL list all the relevant documents needed for complying to this criteria?	Refer Clause no. 63 of GCC Page no. 72 for applicable & relevant compliances

5	2.01 Technical Criteria #1 OEM/EPC	5-6	What documents have to be furnished by an **ODM / EPC Contractor** under this Clause of Technical Criteria?	As per Clause 2.01 (Technical Criteria, Sl. No. 1 — OEM/EPC) of the NIT, the following documents are required depending on the bidder's category: For an ODM (Original Design Manufacturer): i. ODM Manufacturing and factory incorporation certificate / Undertaking confirming ODM status ii. Authorization & Backup Warranty from the OEM (if applicable) — i.e., if a manufacturing OEM supports the ODM, a backup warranty on NIT terms and conditions is required iii. Details of manufacturing units, locations, and works from where supply against this tender shall be proposed (to be furnished by/through OEM) For an EPC Contractor: i. Documentary evidence of experience in integration of field monitoring devices with a central monitoring platform / SCADA / IoT platform / cloud platform ii. Summary list of executed Purchase Orders iii. Purchase Order copies iv. Material Delivery Clearance certificate copies or Invoice Copies or Delivery completion certificates v. Performance Certificate for Supply & ITC of similar project in successful operation for a minimum of 1 year as on date of bid submission Additionally, for any bidder (including ODM/EPC): • Qualifying Criteria Compliance Index duly filled and signed as per Annexure 1.08 and 1.09 and 1.10 • ISO 9001:2015 certification (valid copy) or above — Clause 2.01 #5 • Electrical Contractor License or undertaking to obtain before start of work — Clause 2.01 #6 • Backup service/repair facility details in Delhi-NCR or undertaking to establish one before start of work — Clause 2.01 #4 Note: As per the last paragraph of Clause 2.01, if the bidder is an authorized channel partner of OEM/ODM, documents of OEM/ODM can be furnished by the bidder against points 1 to 5.
6	2.01 Technical Criteria #1 OEM/EPC	5-6	As an ODM, do we need to submit a Manufacturer Authorisation & Backup Warranty form? Is the form expected from the OEM supporting the ODM with manufacturing?	As per Clause 2.01 (Technical Criteria, Sl. No. 1) and Annexure 1.07 of the NIT, the Manufacturer Authorization Form (MAF) requirement is as follows: For an ODM bidding directly: The MAF (Annexure 1.07) is designed 'To be submitted on OEM's Letter Head' and is applicable where an authorized channel partner/system integrator is bidding on behalf of an OEM/ODM. If the bidder itself is the ODM, the MAF in its standard form may not be applicable in the same manner. However, the ODM is still required to submit: i. ODM Manufacturing and factory incorporation certificate / Undertaking confirming ODM status (Clause 2.01 #1) ii. Authorization & Backup Warranty from the OEM supporting the ODM with manufacturing — if an OEM is manufacturing for/supporting the ODM, the backup warranty and authorization must come from that supporting OEM on their letterhead as per Annexure 1.07. For the supporting/manufacturing OEM (backing the ODM): Yes — the Manufacturer Authorization Form (Annexure 1.07) is expected from the OEM that is supporting the ODM with manufacturing. The form requires the OEM to: • Authorize the ODM to submit a bid • Extend full guarantee and warranty as per the Contract conditions • Confirm that if the channel partner/ODM fails to provide services, the OEM shall provide standard warranty on the materials supplied In summary: If the ODM is the bidder and an OEM supports its manufacturing, the Manufacturer Authorization Form (Annexure 1.07) must be submitted on the manufacturing OEM's letterhead as a backup warranty/authorization document. Bidders are advised to seek confirmation on this specific interpretation during the pre-bid clarification process.
7	GENERAL CONDITIONS OF CONTRACT (GCC) #48 Transfer and Subcontracting	64	What is the process for obtaining the Purchaser's written approval to subcontract, transfer, or assign parts of the Contract? Specifically, is such approval required as part of the bid submission? If yes, what documentation must be provided by the Bidder?	The Approval has to be taken after contract award. The Subletting proposal has to be submitted to Engineer-in-charge and will be approved by BRPL Head C&M.

8	PRICE BID (SUPPLY, SERVICES, CIVIL) Division – Janakpuri Scheme no.1 B-1 JKP Sub-division S. No. #1	100	What is the applicable enclosure rating, as there is a discrepancy between IP65 (under Technical Specifications section) and IP56 (Price Bid section) in NIT?	Refer Annexure-I of Corrigendum
9	Technical Specification For IOT-Enabled Low Tension (LT) Feeder Monitoring System # 10.0 Document Submission S. No. 11.12	139	What is expected in the Customer Reference List? Does it have to be of the Manufacturer or the Bidder?	Both manufacture & bidder
10	Technical Specification For IOT-Enabled Low Tension (LT) Feeder Monitoring System # 6.0 Marking S. No. 6.1	132	Can BRPL specify the exact parameters and their ratings that are required to be printed on the nameplate?	During detail engineering
11	Technical Specification For IOT-Enabled Low Tension (LT) Feeder Monitoring System # 5.0 Technical Requirement # 5.6.2 WAN communication S. No. (a)	129	Could BRPL please clarify whether HTTPS/REST APIs are intended to be an alternative communication/transport protocol alongside MQTT over TLS, or if they are meant to be used in conjunction with MQTT as part of the same communication stack? HTTPS and REST APIs can only collect and visualise meter data and events on demand by the platform. For fastest communication, events have to be pulled from MQTT broker	Both MQTT & API
12	Technical Specification For IOT-Enabled Low Tension (LT) Feeder Monitoring System # 5.0 Technical Requirement # 5.6.2 WAN communication S. No. (e)	129	If 3-phase smart meters are implemented per LT FMU, will BRPL bear SIM and data costs for all ~2984 SIMs or only for ~650 communication devices? If limited to ~650, should bidders include SIM and data costs for the remaining ~2350 SIMs in the AMC?	In order to incorporate different type of solutions offered by bidders under the ambit of specification, following flexibility has been added as corrigendum and updated in the revised BOQ attached. - All electronic devices of FMU and IOT Gateway has been clubbed into a "Set" for each type of architecture (Type-1, 2, & 3) so that number and type of constituent electronic units may be optimally designed by the bidders. - But, number of sim per substation shall not exceed two, - Smart meter can also be used as electronic device
13	GENERAL CONDITIONS OF CONTRACT (GCC) S. No. 8.10 Site Office, Facilities & Storage at Site	47	"Contractor shall be allocated sufficient space for site stores." What is the procedure to avail this option, the associated costs (if any), utilization duration and the number of such site stores that can be provided in each sub-division?	The same shall be explored after contract award depending on Site area.

ANNEXURE-IV

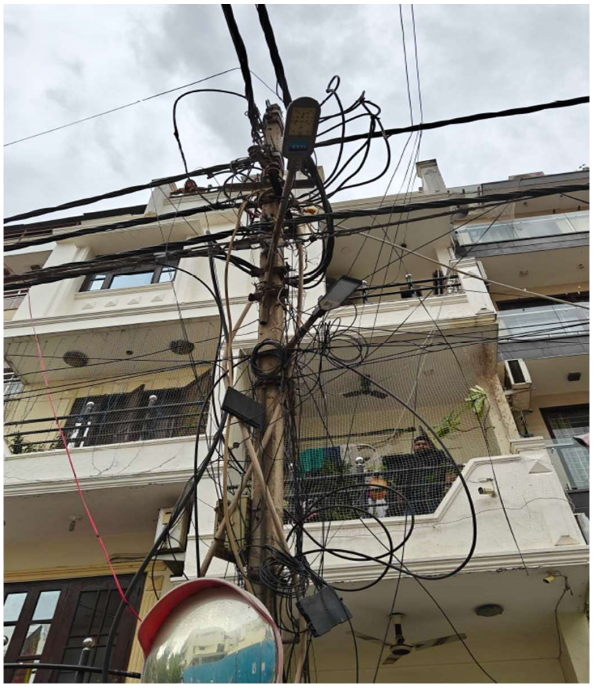
Site Photographs for reference

1. LT Feeder ACBs – Outdoor installation

2. LT Feeder ACBs – Indoor installation


F.No1
LT-R3
सुखी साहब वाले ब्लॉक
फीडर पीलर में
LT MAIN
लोड पैनल
कोट
DANGER
खतरा
DLLTACBJT00459143
DLLTACBGG0125 9142

3. T Point – LT Branch Section Installation on Pole



4. Shackle Point – LT Branch Section Installation on Pole