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Appendix A - Mandatory Technical Specifications

ITIA should provide documentary proof of compliance of following specification. Where it is not possible to submit any certified proof for the same, ITIA shall self certify that it would comply with the specification during implementation.

A	Solution Specifications	Validation Through (Certificate/ Document/ Self Certify)	Available/ Not available
A.1	The solution shall be designed with Service Oriented Architecture. The solution shall be designed based on Component- based approach. It shall be highly granular and loosely coupled to ensure that the failure of one component does not cascade to others.	Document / Self Certify	
A.2	The solution shall be designed on web based architecture.	Document / Self Certify	
A.3	The solution shall be horizontally and vertically scalable and also have virtualization capability.	Document / Self Certify	
A.4	The solution shall be designed with Open Industry Standards and not with Supplier's proprietary protocol.	Document / Self Certify	
A.5	The directory services shall be based on commonly accepted application protocol like LDAP.	Document / Self Certify	
A.6	The proposed solution should be based on WS-* specifications (Web services specifications) & unified access framework compliant to W3C (World Wide Web Consortium) specifications.	Document / Self Certify	
A.7	The application shall provide the functionality to configure the parameters to define the business rules with the application. These parameters shall not be hard-coded in the application.	Document / Self Certify	
A.8	The solution shall provide the functionality to configure the roles & responsibilities and grant role based access to the users. Also, the system shall have the capability to integrate with various standard SSO (Single Sign-On) or IDM (Identity Management) applications.	Document / Self Certify	
A.9	The solution shall use an integration middleware layer so that all required external systems shall be integrated on a continuous basis. The solution shall conform to the requirements specified in Section 3.10	Document / Self Certify	

Table 1: Mandatory Technical Specifications



Α

	G1 of SRS document.		
A.10	The solution shall provide the functionality to encrypt the data stored or transmitted data.	Document / Self Certify	
A.11	The solution shall provide the functionality to maintain the audit trail of all critical transactions.	Document / Self Certify	
A.12	 The solution shall be able to interoperate with: standard RDBMS platforms like Oracle, MS SQL, MY SQL, DB2, Informix, Sybase or any other RDBMS confirming to ANSI/ISO SQL-200n standards operating systems like Windows, Unix, Solaris etc 	Document / Self Certify	TP
	 web browsers like Internet explorer, Mozilla Firefox, Opera etc. 		,
A.13	The solution shall be installed with the latest security updates provided by software Supplier.	Document / Self Certify	
A.14	The software version shall be supported by the software vendor for a minimum period of next five years.	Document / Self Certify	
A1	Module: Meter Data Acquisition		
A1.1	The Meter data acquisition Solution shall be capable of collecting and analyzing data on a common data structure/ format from system/ consumer meters of various makes and models. The solution shall be compatible with present modbus compliant meters installed in utilities as well as future meters likely to be introduced in Indian market complying with DLMS /COSEM/IEC-62056/ANSI C-	Document / Self Certify	
	12.19/IEEE P-1377 Standards.		
A1.2	The regional hierarchy and network topology shall be specific to the Indian context and flexible enough to account for different voltage levels in Indian sub- transmission and distribution networks e.g. 66/33/22/11/ 0.4 KV.	Document / Self Certify	
A2	Energy Audit		
A2 A2.1	Energy Audit The Energy Audit solution shall be able to calculate allowable technical losses and estimated technical & commercial losses in every part of the network via integration with Network analysis module, Meter data acquisition module, GIS based indexing and asset mapping and computerized billing system.	Document / Self Certify	



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A3.1	The Indexed customer database, when created and operational, shall be capable of being 'on line' connected to other business process software without any limitation.	Document / Self Certify		
	The updation of GIS database is mandatory in case of addition of customer/asset or dismantling of existing customer/asset.			
A3.2	The solution shall be based on open GIS standards and shall be OGC (Open Geospatial Consortium) Compliant.	Document / Self Certify	18),
	The solution shall have a ready provision / facility so that it can be easily integrated to the other systems/applications, such as :			
	• SCADA		r	
	• Energy Audit and accounting system			
	• New connection, disconnection & dismantling system			
	Customer Care Centers			
	Customer Information & Billing System			
	• Project Management etc.			
A4	Module: Customer care services			
A4.1	The Customer care service solution shall have single window interface through multiple touch points.	Document / Self Certify		
A4.2	The Customer care service solution shall have call escalation facility, in case the issues are not resolved within the defined service levels.	Document / Self Certify		
A5	Module: Management information Systems			
A5.1	The MIS solution shall provide Business Intelligence Tools for data mining, analysis, trending, simulation etc.	Document / Self Certify		
A6	Module: Identity and Access Management Systems			
A6.1	The Identity and access management solution shall support two factor authentication (Biometrics, tokens etc.)	Document / Self Certify		
A6.2	The solution shall have feature to generate reports in the lines of ISO 27001 standard.	Document / Self Certify		
A6.3	The solution shall provide secure environment for transmitting information across the Internet.	Document / Self Certify		



A6.4	The solution shall provide a mechanism to perform the user authentication procedure. In case of authentication failure, the feedback should not include the reasons for such failure.	Document / Self Certify	
A7	Billing		
A7.1	The solution shall have a ready provision / facility so that it can be easily integrated with:	Document / Self Certify	
	• Automatic online Meter Reading devices and		
	 handheld computers/CMRI used for spot metering & billing 		Y
A8	Asset Management , Maintenance		
A8.1	The solution shall have a ready provision / facility so that it can be easily integrated with :	Document / Self Certify	
	GIS System		
	Customer Care System	Y	
	• SCADA		
В	Hardware Technical Specifications		
B.1	The hardware solution shall meet the performance criteria specified in the contract.	Document / Self Certify	
	In case the offered hardware does not meet the performance criteria, the supplier must provide additional equipments or upgrade the equipments without any additional cost to the utility.		
B.2	The hardware shall be scalable to manage enterprise level solution for the entire utility.	Document / Self Certify	
B.3	The server hardware shall have 64 bit processing capability.	Document / Self Certify	
	Database servers shall be in cluster fail over mode and Application servers shall be in scale out mode.		
B.4	The supplier shall submit the data sheets for each of the hardware model detailing the specifications of the hardware.	Document / Self Certify	
B.5	The hardware models shall be supported by the hardware OEM for a minimum period of next five years.	Document / Self Certify	
B.6	The hardware device operating system shall be EAL 2 certified (Evaluation Assurance Level).	Document / Self Certify	



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С	Mandatory Requirements of OEM for Hardware		
C.1	The OEM vendor shall have ISO 9001:2000 and ISO 14000 certifications.	Certificate	
C.2	The OEM vendor shall have an annual turnover more than Rs. 250 crores from hardware business in each of the last three financial years.	Self Certify + CA Certificate	C
C.3	The OEM vendor shall have at least one service center within the State with sufficient infrastructure.	Document / Self Certify	8

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B Appendix B - Technical Specifications

- Please refer Excel Sheet Appendix B
- The excel sheet has to be filled by the bidder as its response to technical specifications requirements and to be submitted along with the bid, in a CD (in duplicate)
- The hardcopy of the same should necessarily be submitted along with the technical bid submission



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C Appendix C - Service Level Agreement

C.1 Purpose of this Agreement

The purpose of this SLA is to clearly define the levels of service to be provided by Supplier to Purchaser for the duration of this contract or until this SLA has been amended. The benefits of this SLA are to:

- 1 Trigger a process that applies Purchaser and Supplier management attention to some aspect of performance only when that aspect drops below an agreed upon threshold, or target.
- 2 Makes explicit the performance related expectations on performance required by the Purchaser
- 3 Assist the Purchaser to control levels and performance of services provided by Supplier
- 4 This SLA is between Supplier and Purchaser.

C.2 Description of Services Provided

Supplier shall provide service as defined in Section VI - Scope of Work, in accordance to the definitions and conditions as defined in the Section VII - GCC and Section VIII - SCC.

C.3 Duration of SLA

This Service level agreement would be valid for entire period of contract. This SLA may be reviewed and revised according to the procedures detailed in Section C.10 of SLA (SLA Change Control).

C.4 Service Level Agreements & Targets

This section is agreed to by Purchaser and Supplier as the key supplier performance indicator for this engagement. The following section reflects the measurements to be used to track and report systems performance on a regular basis. The targets shown in the following tables are for the period of contract or its revision whichever is later.

Mapping with Section G5 of SRS Document	Service	Parameter	Service Level	Validation	Penalty
5.1	Project Management	Submission of Monthly Project Status reports &	100%	• Minutes of Meetings	2% of monthly FMS charges for

Table 2: Service Level Chart



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Mapping with Section G5 of SRS Document	Service	Parameter	Service Level	Validation	Penalty
		Conducting Status meetings		• Approval of Status reports by Engineer- in-Charge	every default
5.2	Helpdesk	Resolution of ticket logged as per the Severity definition chart	99%	Reports generated from Ticket logging system	95%-99% calls resolved in specified time: 2% penalty on the monthly FMS charges 90% - 95% calls resolved in specified time: 5% penalty on the monthly FMS charges
5.3	Install, Moves, Add, Changes (IMAC) Services	Should be part of Monthly project status report	95%	Report	0.2% of monthly FMS charges
5.4	Asset / Inventory Management	Provide monthly MIS Asset Inventory	95%	Report	0.2% of monthly FMS charges
	AMI	Provide monthly MIS on new requirements with procurement time	95%	Report	0.2% of monthly FMS charges
23		Conduct Annual Physical Asset verification	100%	Management approval of Physical Asset Verification report	0.5% of Yearly FMS charges
5.5	Supplier Management Services	Evaluation of Supplier Performance on quarterly basis	100%	Management approval of Supplier Performance evaluation report	0.5% of Quarterly FMS charges
		Tracking of	95%	Status of	0.5% of monthly



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Mapping with Section G5 of SRS Document	Service	Parameter	Service Level	Validation	Penalty
		Supplier SLA & tickets logged with suppliers		tickets logged with Suppliers	FMS charges
		MIS reporting on AMC tenure, License fees	95%	Report	0.2% o monthly charges
5.6	Desk Side Technical support Services	Resolution of ticket logged as per the Severity definition chart	95%	Reports generated from Ticket logging system	1% of monthly FMS charges
5.7	Antivirus Management	Rollout of latest anti-virus definition file on workstations and Servers on being made available on Supplier's website	98%	Reports generated from Anti Virus software console	1% of monthly FMS charges
5.8	LAN & local server administration	Resolution of ticket logged	99%	Reports generated from Ticket logging system	Covered unde 5.1
5.9	Network Monitoring & Management	SI to monitor the availability of the network link for 99% uptime. SI should measure link availability on a monthly basis.	99%	Downtime reports Reports on the Network performance	Penalty of 2% per month will be deducted from the monthly FMS charges of that utility, if the reports are not submitted by the SI.
23.	7				Important: A separate SLA will be signed with bandwidth provider.
		Resolution of ticket logged related to Networks	99%	Reports generated from Ticket logging system	Covered unde 5.1
		Data Centre Network	99.8%	Report	• 2% of monthly FM



Mapping with Section G5 of SRS Document	Service	Parameter	Service Level	Validation	Penalty
		Availability Minimum of 99.8% uptime measured on a monthly basis		RIC	 charges for less than 99.8% 3% of monthly FMS charges for less than 98.0% 5% of monthly FMS charges for less than 95%
		Regional Offices Network Availability Minimum of 98% uptime measured on a monthly basis	98%	Report	 2% of monthly FMS charges for less than 98% 3% of monthly FMS charges for less than 97% 5 % of monthly FMS charges for less than 95 %
22.		Divisional & Other Offices Network Availability Minimum of 97% uptime measured on a monthly basis	97%	Report	 2% of monthly FMS charges for less than 97% 3% of monthly FMS charges for less than 95%



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Mapping with Section G5 of SRS Document	Service	Parameter	Service Level	Validation	Penalty
5.10	Data Centre Operations	MIS reporting on physical and environmental conditions controls	95%	Report	0.2 % of monthly FMS charges
		MIS reporting of health checkup of all systems & modules installed	95%	Report	0.2 % of monthly FMS charges
5.11	Server Administration / Management	Rollout of patches (OS, infra level) on workstations and Servers after patch being approved on test environment	98%	Patch update report	0.5% of monthly FMS charges
		Uptime of app servers	99.8%	Report	• 2% of monthly FMS charges for less than 99.8%
					 3% of monthly FMS charges for less than 98%
S.					• 5 % of monthly FMS charges for less than 95%
		Uptime of utility servers except email	99.8%	Report	• 2% of monthly FMS charges for less than 99.8%
					 3% of monthly FMS charges for



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Mapping with Section G5 of SRS Document	Service	Parameter	Service Level	Validation	Penalty
					less than 98% • 5 % of monthly FMS charges for less than 95%
5.12	Database Administration services	MIS report of database scheme, disk space, storage and user role	99%	Report	0.5% of monthly FMS charges
5.13	Backup/ Restore Management	The Supplier should take backup as per the backup schedule defined by utility	99%	Report	If the negligence is found in monthly audit, the Bidder would be penalised a sum of Rs. 5,000/- per negligence.
	MI	Utility would periodically (once a quarter on a random day) request the Supplier to restore the backup data	100%	Report	Rs 5000/- for every restore test failure
5.14	Mail / Messaging System	Uptime of email server	99%	Report	• 2% of monthly FMS charges for less than 99%
) >					 3% of monthly FMS charges for less than 98%
					• 5 % of monthly FMS charges for



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Mapping with Section G5 of SRS Document	Service	Parameter	Service Level	Validation	Penalty
5.15	Management	Provide monthly MIS of user account and mailboxes created/deleted. Daily MIS of	95%	Report Reports	less than 95% 0.2% o monthly FM charges 0.5% o
5.15	Management of utility's EMS	server and device health checkup (CPU, disk space, memory utilization, I/O utilization, Central Storage etc.)	100%	generated from EMS system	monthly FM charges
6.1	Incident management	Resolution of ticket logged in Incident Management tool	99%	Reports generated from Ticket logging system	0.5% o monthly FM charges
6.2	Ticketing Management	Same as 6.1			
6.3	Problem Management	Supplier shall analyze all the incidents and provide a root cause report every month if there are more than 10 incidents of the same type. Supplier shall take the needed corrective action to prevent further issues due to the same cause.	100% timely submission covering all incidents logged in that month	 Root cause report Incident report stating problems faced by the users Document detailing corrective action 	 5% penalty on the monthly FM charges of that Project Area, if the Supplier does not submit a problem report for that month. 5% penalty on the monthly FM charges of that Project Area, if the Supplier does not perform the corrective



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Mapping with Section G5 of SRS Document	Service	Parameter	Service Level	Validation	Penalty
					action for more than one calendar month.
6.4	Change Management	Resolution of Change Management ticket logged in Change Management tool	99%	Reports generated from Change Management System	Covered under 5.1
6.5	Release Management	Same as 6.1			
6.6	Email Listner	Same as 5.14			
6.7	Availability Management	Should be part of Monthly status report	95%	Report	0.2% of monthly FMS charges
6.8	Performance Management	Should be part of Monthly status report	95%	Report	0.2% of monthly FMS charges
6.9	Capacity management	Should be part of Monthly status report	95%	Report	0.2% of monthly FMS charges
6.10	Security Management	Should be part of Monthly status report	95%	Report	0.2% of monthly FMS charges
7	Resource Management	Number of shift days for which resource present at the designated location / Total number of shift days	98% averaged over all resources designated for SI services - calculated on a monthly basis	 Attendanc e track Call Log Audit calls/ visits Measured on a monthly basis 	If the resource availability is less than 95%, then payment shall be deducted based on the pro-rata basis. (Total FMS cost per day divided by nos. of persons deployed)



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Mapping with Section G5 of SRS Document	Service	Parameter	Service Level	Validation	Penalty
					Further deduction Rs.2,000/- per day per engineer/shall also be made on account of loss of utility/service
		Resource provided is not as per specified certification / experiences	100% of the resource given	Experience Certificate of FMS personnel submitted by Supplier to Utility	Per day deduction = 0.5 * (Monthly value for that manpower as per SOR) / 30

Uptime Calculation for the month:

{[(Actual Uptime + Scheduled Downtime) / Total No. of Hours in a Month] x 100}

"Actual Uptime" means, of the Total Hours, the aggregate number of hours in any month during which each equipment, is actually available for use.

"Scheduled Downtime" means the aggregate number of hours in any month during which each equipment, is down during total Hours, due to preventive maintenance, scheduled maintenance, infrastructure problems or any other situation which is not attributable to Supplier's (or Service provider's) failure to exercise due care in performing Supplier's responsibilities.

The Purchaser would provide a maximum of 04 hours of planned downtime for the preventive maintenance (as part of scheduled downtime) per month per equipment/service.

The downtime for scheduled maintenance (patch application, upgrades - OS, Database, etc.) would need to be mutually agreed between Utility and the Bidder. To reduce this time, various maintenance activities can be clubbed together with proper planning.



"Total Hours" means the total hours over the measurement period i.e. one month (24 * number of days in the month).

Downtime Calculation:

The recording of downtime shall commence at the time of registering the call with Supplier or Service Provider for any downtime situation for the equipment.

Downtime shall end when the problem is rectified and the application/ service is available to the user.

Down time will not be considered for following:

1. Pre-scheduled preventive maintenance and health checks (Scheduled Downtime).

2. Failover time (30 minutes) in case of cluster environment. Beyond which the service would be considered to be not available and appropriate penalty shall be imposed on the Supplier.

3. Bug in any application which causes the non-availability of the service.

If the utility elects to continue the operation of the machine / equipment, when a part of the machine is giving problem and leading to downtime, the commencement of downtime shall be deferred until the utility releases the machine / equipment to the Bidder for remedial action.

Severity definition chart is tabulated below for reference.

Support Categor y	Criteria	Resolutio n	Maximum Response Time
Critical	The system is unable to be used for normal business activities. There is certainty of financial loss to PURCHASER.	90 Minutes	15 Minutes
Urgent	There is a problem with part of the system, which impacts on Purchaser's decision making. No viable workaround is available. There is a likelihood of financial loss.	4 Hours	1 Hour
High	The efficiency of users is being impacted, but has a viable workaround.	6 hours	2 Hours

Table 3: Severity Definition Chart



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Medium	A low impact problem that affects the efficiency of users but has a simple workaround.	12 Hours	8 Hours
Low	A fault, which has no particular impact on processing of normal business activities.	One Week	8 Hours

C.5 Breach of SLA

In case the Supplier does not meet the service levels mentioned in Section C.4 of this Appendix & Section G5 of SRS document, for three (3) continuous time-periods as specified in the relevant clause, the Purchaser will treat it as a case of breach of Service Level Agreement. The following steps will be taken in such a case:-

- 1. Purchaser issues a show cause notice to the Supplier.
- 2. Supplier should reply to the notice within three working days.
- 3. If the Purchaser authorities are not satisfied with the reply, the Purchaser will initiate termination process as described in clause 33 of Section VII, GCC.

C.6 Exclusions

The Supplier will be exempted from any delays or slippages on SLA parameters arising out of following reasons:-

- 1 Delay in execution due to delay (in approval, review etc) from Purchaser's side. Any such delays will be notified in written to the IT Team.
- 2 The network links will be provided by a third party and the Supplier will monitor and report any problems on behalf of third party. If Supplier notifies and Purchaser approves that the delay or fault was due to the third party link services then such loss will not be considered for tracking Supplier's SLA parameters (Also reduced from total service time).

C.7 Monitoring and Auditing

IT Team of Purchaser will review the performance of Supplier against the SLA parameters each month, or at any periodicity defined in the contract document. The review / audit report will form basis of any action relating to imposing penalty or breach of contract. Any such review / audit can be scheduled or unscheduled. The results will be shared with the Supplier as soon as possible. Purchaser reserves the right to appoint a third-party auditor to validate the SLA.

C.8 Reporting Procedures

The Supplier's representative will prepare and distribute SLA performance reports in an agreed upon format by the 10th working day of subsequent month of the reporting



period. The reports will include "actual versus target" SLA performance, a variance analysis and discussion of appropriate issues or significant events. Performance reports will be distributed to the Purchaser's IT Team.

C.9 Issue Management Procedures

C.9.1 General

This process provides an appropriate management structure for the orderly consideration and resolution of business and operational issues in the event that quick consensus is not reached between Purchaser and Supplier. It is expected that this pre-defined process will only be used on an exception basis if issues are not resolved at lower management levels.

C.9.2 Issue Management Process

- Either Purchaser or Supplier may raise an issue by documenting the business or technical problem, which presents a reasonably objective summary of both points of view and identifies specific points of disagreement with possible solutions.
- Purchaser and the Supplier's representative will determine which committee or executive level should logically be involved in resolution.
- A meeting or conference call will be conducted to resolve the issue in a timely manner. The documented issues will be distributed to the participants at least 24 hours prior to the discussion if the issue is not an emergency requiring immediate attention.
- Management of Purchaser and Supplier will develop a temporary, if needed, and the permanent solution for the problem at hand. The Supplier will then communicate the resolution to all interested parties.
- In the event a significant business issue is still unresolved, the arbitration procedures described in the Contract will be used.

C.10 SLA Change Control

C.10.1 General

It is acknowledged that this SLA may change as Purchaser's business needs evolve over the course of the contract period. As such, this document also defines the following management procedures:

- 1 A process for negotiating changes to the SLA.
- 2 An issue management process for documenting and resolving particularly difficult issues.
- 3 Purchaser and Supplier management escalation process to be used in the event that an issue is not being resolved in a timely manner.



Any changes to the levels of service provided during the term of this agreement will be requested, documented and negotiated in good faith by both parties. Either party can request a change. Changes will be documented as an addendum to this document and consequently the contract.

C.10.2 SLA Change Process

Both the parties may amend this SLA by mutual agreement in accordance. Changes can be proposed by either party. Normally the forum for negotiating SLA changes will be Purchaser's monthly review meetings.

C.10.3 Version Control

All negotiated SLA changes will require changing the version control number. As appropriate, minor changes may be accumulated for periodic release (e.g. every quarter) or for release when a critical threshold of change has occurred.

C.11 Management Escalation Procedures

The purpose of this escalation process is to provide a quick and orderly method of notifying both parties that an issue is not being successfully resolved at the lowest possible management level. Implementing this procedure ensures that purchaser and Supplier management are communicating at the appropriate levels. Escalation should take place on an exception basis and only if successful issue resolution cannot be achieved in a reasonable time frame.

- 1. All issues would be raised to the project management team, which is completely responsible for the day to day aspects of the implementation. The project management team shall classify the issues based on their severity level and resolve them within appropriate timelines.
- 2. If project management team is unable to resolve an issue, the issue would be escalated to the top management with options/ risks detailed for decision. Top management will make decisions based on the options/ risks presented by the IT team.
- 3. In case one or both the parties are unsatisfied with the decision of the top management of the Purchaser, the dispute will be resolved as specified in clause 8 of Section VIII GCC.

C.12 Signature Page

IN WITNESS WHEREOF, the parties hereto have caused this Service Level Agreement to be executed by their respective authorized representatives as of the date first written above.

Supplier (On Behalf of all consortium members also) Purchaser



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Signature
Name
Address
Company
Date

Signature -----

Name -----Designation -----

Date -----



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D Appendix D - Supplier Response Format

D.1 General Guidelines to the bidders

The Purchaser will select a Supplier (also referred as the 'bidder') in accordance with the eligibility criteria indicated in Section IV.

The bidders are invited to submit a Technical Proposal and a Price Proposal for goods and related services required for the project as defined in Section VI, Scope of Work and Appendix L. This proposal will be the basis for contract negotiations and finalization of the contract with the successful bidder.

The bidders must familiarize themselves with local conditions and take these into account while preparing their proposals. To facilitate the bidders in making the Proposal, the Purchaser shall have a 'Pre-Bid conference' at the address and date as given in ITB, Section II.

Please note that:

- Costs involved in preparation of the proposal and of negotiating the contract, including a visit to the Purchaser, are not reimbursable.
- The final evaluation will be based on both technical and commercial factors as per the evaluation methodology mentioned in the Appendix E.
- Please check all attachments with the checklist provided at the end, prior to submission of bid.

D.1.1 Guidelines for Technical proposal

In preparing the Technical Proposal, bidders are expected to examine this Bid document in detail. The proposal should cover all the aspects of this bid document. Any bid not found responsive to this bid document shall be rejected. Material deficiencies in providing the information requested may also result in rejection of the proposal.

While preparing the technical proposal, bidders must give particular attention that the technical proposal does not include any financial information.

D.1.2 Guidelines for Price proposal

In preparing the price proposal, bidders are expected to take into account the requirements and conditions of the bid document. The price proposal should follow standard formats/forms as given in Appendix D.3.



<u>Bidder should quote for each Project Area cost separately and also provide the consolidated cost of the project.</u>

Price Proposal should clearly indicate the price to be charged without any qualifications whatsoever and should include all taxes (sales, service, etc.), duties (excise & customs, etc), octroi, fees, levies, works contract tax, Entry tax and other charges as may be applicable, to be paid pre- or post-delivery or to be deducted by the purchaser at source, in relation to the Goods and Related Services. Such taxes, duties, cess, charges etc, if not explicitly mentioned in the Price bid tables in Appendix H.3, but applicable under law, should be included in the Quote under "Any other levies" column. The price proposal should be conformance to clause 12.3 of ITB, Section II.

D.1.3 Submission of proposal

- The original technical proposal and price proposal shall be prepared in indelible ink. It shall contain no inter-lineation or overwriting, except as necessary to correct errors made by the bidder itself. The authorised representative must initial any such corrections as mentioned in clause 21.2 ITB, Section II.
- An authorised representative of the bidder should initial all pages of the proposal.
- The bidders should submit *five* hard copies and *five* soft copies in separate compact discs as per clause 21.1 ITB, Section II. The soft copies should be necessarily in **MS Word / MS Excel** format (editable) besides other format(s).
- Bidders are requested to submit a proposal written in the English language. Bidders would need to submit both the technical and the price proposals.
- The proposal should be typed in "Times New Roman" font, size 11 with single line spacing.
- The document should be precise to requirements and concise in nature.
- Each technical proposal and price proposal should be marked "Original" or "Copy" as per clause 21.1 ITB. Section II. If there are any discrepancies between the original and the copies of the Proposal, the original governs. Proposals containing erasures or alterations are liable to be excluded from the evaluation process.
- The original and all copies (also softcopies) of the technical proposal shall be placed in a sealed envelope clearly marked "Technical Proposal". The original and all copies (also softcopies) of the price proposal should also be placed in a sealed envelope clearly marked "Price proposal" along with a warning: "Do not open with the Technical Proposal." Both envelopes shall be placed into an outer envelope and sealed. This outer envelope shall be super scribed with the following information:
 - 1. Name of the bidder
 - 2. Due date and time of submission
 - 3. Submission address and contact detail



A clear marking stating: "DO NOT OPEN, EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE."

• Any omissions / deviations on the above, will cause rejection of the bid

The completed technical and price proposal must be delivered at the submission address on or before the time and date stated in the Bid Data Sheet, Section III. The Purchaser will not be responsible for any postal or transit delays. Any proposal received after the closing time for submission of proposals shall be returned unopened.

D.2 Technical Proposal

D.2.1 General requirements

D.2.1.1 Bid structure

The response should include detailed structure of the bid specifying the names of bidder, consortium member (if any) and subcontractors, stating their respective responsibilities. Use following format:-

Role	Name of Company & Address
Bidder (SI/ Lead member in case of consortium for SI role)	
Consortium member (Second member in case of consortium for SI Role)	
GIS Solution Provider	
Network Solution Provider	
Meter Data Acquisition Solution Provider, if required	

Table 4: Bid Structure

D.2.1.2 Bidder - Company Statistics

Please provide the general and financial details of each of the entities (bidder, consortium member (if any) and subcontractors) in the following formats:

Table 5: Bidder - Company Statistics



Details	Supplier Response
Bidder's Name	
Address	
Contact (s), Title (s), Telephone (s), E-mail id (s)	
Name of the Chairman/ MD/ CEO/ Partners	
Nature of Ownership	
Date of Incorporation of Company/Entity	
Headquarter Location	
Other Office Locations, Functions and Personnel Strength	
Number of Employees by Function	
Implementation	
• Sales	
• Support	
Quality Assurance	
Administrative	Y
Management	
Size of Team for the Proposed Solution	
Location of Support Centers for Proposed Solution	
Other Businesses	

D.2.2 Technical Specification requirement of Application packages

Refer to Technical Specifications, Appendix B.1 for details. Please respond to each specification in following format. Copy first three columns from Appendix B.1.

Table 6: Technical Specification for Application Packages

No	Functional Requirements	Criticality	Supplier Response	Remarks



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The code to be used for providing Supplier rating responses in the column "Supplier Response" for the functional requirements is provided below:

- A Functionality not available;
- B Available with modification/workaround
- C Functionality available

Please note that the rating as per the above scale is to be entered in the "Supplier Response" column, and column titled "Remarks" is to be used for commenting on aspects related to the functional specification. Bidders have to fill on two columns ("Supplier Response" & "Remarks").

Please also note that the serial no. and format of response should be exactly similar to that given in Appendix B.1. Please note that the response is also to be provided in soft copy in addition to the hard copy.

Please provide a summary of versions of various modules, if the proposed solution is a product. Use following format:-

Name of product	Module details	Version and year of release
	A	

Table 7: Details of Product Offered

D.2.3 Hardware Technical Specifications (Including network equipments, LAN/WAN, Kiosk etc.)

Refer to Technical Specifications, Appendix B.2 for details.

Please respond to each specification in following format.

Table 8: Technical Specifications of Hardware

	No	Description/Requirements	Priority	Supplier Response	Remarks
1					

The code to be used for providing Supplier rating responses in the column "Supplier Response" for the hardware requirements is provided below:



A. Compliant

B. Not Compliant

Please note that the rating as per the above scale is to be entered in the "Supplier Response" column, and column titled "Remarks" is to be used for commenting on aspects related to the functional specification. Bidders have to fill on two columns ("Supplier Response" & "Remarks").

Please also note that the serial no. and format of response should be exactly similar to that given in Appendix B.2. Please note that the response is also to be provided in soft copy in addition to the hard copy.

Please mention the detailed specification of hardware equipment and system software (operating system, database etc.) including manufacturer, technical details etc. The bidders should provide details of required system software like operating system , database for solution and utilities in following format :-

Product details	No. of installations	Version and year of release

Table 9: Details of Hardware Offered

D.2.4 Approach and Methodology

The following table elaborates various requirements within A&M:

- i. Understanding of Purchaser and its requirement with clear mention of the deliverables
- ii. Details of proposed methodology
- iii. Project Team Structure
- iv. Resource planning and estimation
- v. Risk planning
- vi. Detailed work plan with timelines

D.2.4.1 Understanding of Utility and its requirement

Bidder should depict complete understanding of the as-is system of the Utility based on the information provided in the Bid Document. It should also require to list down all the deliverables that has been planned as a part of the overall project with timelines. Also provide details of prior interaction with Utility, if any.

D.2.4.2 Details of proposed methodology

Please provide details of methodology followed by your organization in successfully implementing similar projects. Also highlight the special steps that your



organization/ consortium intends to take in order to ensure that the change from current system to proposed one will be smooth and effective.

D.2.4.3 Project Team Structure

In this section please provide detail of the team that would be deployed by your organization to execute the project. Please provide details of the team structure in the following format:

Name of Staff	Position Assigned	Internati onal or Domestic	Firm	Employme nt status with the firm (Full time/ Associate)	Education (Degree, Year, Institution)	Area of Expertise and number of years of relevant experience	Task Assigned
A. Professional Staff							
P. Support					/		
B. Support Staff							
				r			

Table 10: Proposed Project Team Structure

D.2.4.4 Resource planning and estimation

Bidder shall provide detailed staffing schedule of the professional and support staff in the following format:

For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: IT administrator, field survey staff etc.).

• Months are counted from the start of the assignment. For each staff indicate separately staff input for off-site and on-site work.



No	Name of Staff	Positio n	Staff Inp	Staff Input						
			ln Weeks	W1	W2	W3	W4	W5		Total
	A. Professional Staff									
	B. Support Staff									

Table 11: Proposed Resource Planning and Estimation

D.2.4.5 Risk planning

Bidder shall assess underlying risks in implementation of the Project and detail out the methodology to mitigate them. It may include development of a risk assessment matrix indicating severity of the risk, chance of its occurrence and its mitigation approach.

D.2.4.6 Detailed work plan with timelines

Please refer Appendix N for the format.

D.2.5 Project Experience

Bidder shall provide details of projects with application modules and other requirements (as mentioned in Eligibility Criteria, Section IV) which have been successfully completed during the last 3 financial years.

Please do not supply the names of clients who are no longer using your product/system.

Bidders need to submit the details as per the format in the table provided.

Table: The details of the same should be included in the following format and necessary supporting documents should be attached with RFP:



Table 12: Details of Project Experience

SI. No	Name of project	Brief Scope necessarily including role played by Bidder, modules implemented, sector classification	Owner of Project assignm ent (Client name)	Curren cy of Payme nt (in INR or USD)	Cost of assig nmen t	Date of Awarde d comme ncemen t	Date of comple tion	Was assignm ent satisfact orily complet ed	Was it a Power Sector Project ? (Y/N) Provid e Detail
									λh
									*

Please provide separate client details for bidder & each consortium member (Implementation partner, product Supplier, WAN/bandwidth/Internet service provider etc.)

D.2.6 Team details (CVs)

Use the following format for key personnel who would be involved in the project. Please include details of team members proposed to implement the project, install or manage hardware, install and manage LAN/WAN and related equipments, provide GIS solution etc., please ensure that the CV has a maximum length of 3 pages.

In case of replacement of Supplier personal from the project team, Supplier is required to submit to the nominated Utility personal the CV of the new person with equivalent or better education qualification and relevant professional experience who will be joining the team and get in duly approved. The new person can start working in the project only after his/her CV has been approved by the Utility.

Table 13: Format of Curriculum Vitae

- 1. Proposed Position:
 - Name of Firm and ITIA Role
- 2. (SI/NSP/GSP/MDASP)
- 3. Name of Staff:
- 4. Date of Birth:

Nationality:

5. Education:

Year	Degree/Examination	Institute/Board



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Membership of

- 6. Professional Associations:
- 7. Other Training:
- Countries of Work
- 8. Experience:
- 9. Languages:

Language	Speaking	Reading	Writing

10. Employment Record:

	· ·								
	From	То		E	mployer	Positions Held			
11.	Detailed Tasks Assigned:			12.	Work Undertaken t the tasks assigned:	that best illustrates capability to handle :			

13. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Signature of authorised representative of the staff Da Full name of authorised representative:

Date:

Full name of authorised representative:

D.2.7 Firm Detail

Bidder shall provide details of CMM/CMMI and ISO certification along with the details of net-worth and turnover for the past three audited financial years in the following format:

Table 14: Firm Detail

Details	Year 1	Year 2	Year 3
Net-worth			
Turn-Over			
Level of CMM/CMMI Certification	(Yes/No)		



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ISO Certification (Yes/No)

The audited financial reports and copy of the certificates supporting the above need to be submitted as proof.

D.2.8 Facility Management Services Plan

The detail plan for FMS shall be given in accordance with the Section G5 of SRS Document.

D.2.9 Project Management Practices

Please provide high-level details of the project management practices that will be followed to manage the project. The project management practices would include (but not be limited to) details of:-

- Bidder must provide details of how they envisage the contract being managed including principles such as (but not limited to) joint planning and control mechanisms; regular and active review meetings; Project management of individual work streams and overall program management of the entire service; Performance reporting
- Bidder should outline their proposed governance structure and designate a Service Manager to co-ordinate their activities and provide a focal point of contact to whom Utility can refer on any matter concerning the service.
- Reporting lines and decision-making powers within the bidder's organization must be explained
- Reporting formats and templates that would be followed by the bidders
- Outline the proposed escalation procedures in the event that issues arise.

D.2.10 Quality Assurance

- Quality of service Suppliers must provide details of their proposed approach to quality assurance to ensure the quality of services in accordance with clause 19 of Section G1 of SRS Document. This should include:
 - Responsibility of quality of service;
 - How the supplier will ensure quality service is provided;
 - How quality will be measured
- Does your company (and consortium partner) have any quality certification / Assessment? If so, please provide your responses for the following:



Table 15: Details of Certification

Description	Bidder's Response
Certification / Assessment Name	
Who issued the certification/assessment?	
When was the certification/assessment obtained?	
Does this certification/assessment process involve periodic reviews and observations/ remarks after such review? If so, please provide details and specify when your company is due for its next quality review?	28

• Please specify your company's process for product development and enhancements

D.2.11 Documentation

Please provide a list of all user documents that will be provided along with the software package. This must include the following minimum documents:

- System and administration manuals
- Technical support handbook
- User Manuals;
- Error Messages and their Meanings;
- Training Manuals;
- Analysis & Design Manuals with the relevant data flow diagrams, entity relationship diagrams, schemas etc.;
- Additions/ changes to the documents after upgrades; and
- Operations Manuals.

D.2.12 Deviations Sheet

Only "non-material deviations" (which means only those deviations that do not qualify as material deviations as defined in ITB clause 29.2 of bid document) will be considered by the purchaser. Please describe all the non-material deviations w.r.t Terms and conditions described in the General conditions of contract, Section VII & Special conditions of contract, Section VIII.



If bidder desires to take any non-material deviation from the terms & conditions of the tender, it should be mentioned specifically in this deviation sheet. Unless such deviations are mentioned in this deviation sheet, the same will not be taken into consideration.

	Tender Clarifica	tions - Terms and Conditi	ions
Sl. No.	Tender Reference (Section / Clause number)	Details of Clauses / Section needing deviation	Deviation proposed

Table 16: Format for Deviations

Except aforesaid deviations, the entire order, if placed, shall be executed in accordance with specifications and any other conditions, variations/deviations etc. if found, elsewhere in this proposal should not be given any consideration while finalizing the tender.

It is not mandatory to consider and accept the deviation mentioned on deviation sheet proposed by the bidder.

Note: - Continuation sheet of like size & format may be used as per bidder's requirement wherever necessary.



D.3 Price proposal

Bidders are requested to provide cost for each of the Project Area in the subsequent formats. The Bidders should take a note of following points while filling the Price proposal.

- 1 Bidder will be responsible for payment of Taxes (including local entry taxes), duties, cess, charges etc, including taxes, duties, cess, charges etc, to be paid by the Supplier pre- or post-delivery. Such taxes, duties, cess, charges etc, if not explicitly mentioned in the following tables, but applicable under law, should be included in the Quote under "Any other levies" column.
- 2 The Bidder will provide Tax rates assumed for the calculation at the time of proposal for each item in notes to respective table.
- ³ Please refer to GCC Clause 13.2 and the SCC —for Price adjustments due to change in Tax rates (including local entry taxes), duties, cess, charges etc.
- 4 Purchaser reserves the right to deduct and pay to the government authorities the taxes at applicable rates from the price payable to the supplier.
- 5 The unit prices mentioned for various components should be the same for all Project Areas. In case of any discrepancy among unit prices of various Project Areas, the lowest unit price of equipment mentioned for any Project Area shall prevail.
- D.3.1 Utility proposes establishment of one centralized Data Centre and Customer Care Centre which are located in the Project Area(s) defined in the Appendix F (List of offices for WAN connectivity). Project Area with Data Centre & Customer Care Centre

Bidder should refer Appendix F to fill in following information:

Name of Project Area (town):-	
Location Data Centre:-	Chennai
Location of Customer Care Centre:-	Chennai
Location of Data Recovery Centre:-	Madurai



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Number Subdivision Offices under the Project Area:-

Number of Other Offices under the Project Area:-

- Forms (Form 1 to Form 6) mentioned in the Appendix D.3.1 should only be filled, by the bidder, to provide cost of IT implementation for Project Area where Data Centre and Customer Care Centre are located. Form 7 to be filled to provide cost for the Disaster Recovery Center. Bidders to note that the Data centre software and applications will include DR license (for DR Site). In case bidder needs additional software for DR Site, the same has to be added by the bidder in the DR Form (Form 7). For other Project Area(s) of the Utility, Forms (Form 3 to Form 6) mentioned in Appendix D.3.2 should be filled.
- Bidder should define quantity and unit price which includes FOB, Freight & Insurance, Excise Duty, CST/VAT and any other levies for each item listed below in the following format.
- Other offices cover (but not limited to) head quarter, regional offices, circle offices, division offices, sub division office, section office, etc. These offices are not to be provided with any server and shall have connectivity with Data Centre to transfer/access information.

Form 1: Data Centre Cost

- Bidder should provide lumpsum cost of installation, testing & commissioning, training of employees, data migration cost etc. including all taxes in the format provided below.
- WAN/LAN implementation charges shall include charges for setup, configuration, training, installation, cables, liaisoning with service provider, etc.



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											7	
Item description	Type (Refer SRS Document for exact Technical Specificatio	Unit	Qua ntit y	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Hardware/ Equipment												
Server Hardware												
Database Server for GIS in cluster fail- over Mode		No.										
Database Server for other applications in cluster fail-over Mode		No.										
GIS Application Server		No.										
Application Server for others		No.										
Data Acquisition Server.		No.										
Testing, Development & QA Server		No.										
Access Control Server		No.										
Anti-Virus Server		No.										
DNS Server		No.										
LDAP Server		No.										
Web Server		No.										
Reverse Proxy Server	R	No.										
EMS/NMS Server		No.										





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Item descriptionType (Refer SRS Document for exact Technical Specificatio ns)UnitQua nti yFOB (per unit)Freigh t & t Insura nce (per unit)Excise Duty Duty (per unit)Sales & Any other taxes (per unit)Any other levies (per unit)Total Cost (per unit)Total Cost (per unit)Image: No.Image: No	Excise&Any total otherTotal otherDutyCST/other taxesother leviesCost (per unit)To costunit)(per unit)(per unit)unit)Cost (per unit)To cost	Duty CST/ (per VAT unit)	Excise Du Duty (p un	t & nsura nce (per	(per		11	SRS	
with Network Operation Console Image: Console in the	Rs. % Rs. Rs. Rs. R	Rs. %	0/ D	unit)	unit)		Unit	for exact Technical	Item description
Operation Console No			% K	Rs.	Rs.			ns)	
							No.		Mail/ Messaging Server
Sub Total									Sub Total
Workstation PC No. (Computer chair, table etc.) No.							No.		(Computer chair,
Sub Total									Sub Total
Storage & Backup Devices									
SAN storage No.					/		No.		SAN storage
Fiber Channel SAN No.							No.		
SAN Cabling Set Set					Z		Set		SAN Cabling
Backup Server No. No.							No.		Backup Server
Tape Library No. No.							No.		Tape Library
Other Storage No. No.					Y	\square	No.		Other Storage
Sub Total									Sub Total
Server Racks									Server Racks
IDF/MDF Wall Mount No. No.							No.		Racks
IDF/MDF Floor Mount Racks No.							No.		
Sub Total									Sub Total
Switches I I I I I I I I I I I I I I I I I I I									Switches





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											Y	
Item description	Type (Refer SRS Document for exact Technical Specificatio	Unit	Qua ntit y	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Core Switch		No.										
Access Switch		No.										
Distribution Switch		No.										
Layer II Switch		No.						X				
Sub Total												
Routers												
Router for MPLS/ VPN Network		No.										
Router for Internet Gateway		No.										
Sub Total						Y						
Other Active Devices												
Application Load Balancer					<i>.</i>							
Cabling System												
Cables, Jacks etc.		Lot										
Fiber Optical Cable, Connectors, Patch Cord etc.		Lot										
Sub Total												
UPS & Battery System												
Critical Load UPS		No.										
Service Load UPS		No.										



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											7	
Item description	Type (Refer SRS Document for exact Technical Specificatio	Unit	Qua ntit y	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Sub Total												
IP Telephony												
IP PBX		No.										
IP Phones		No.										
Sub Total												
Printers & Others												
Network LaserJet (B/W) Printer		No.										
Media for DAT drive		No.										
Blank Cartridges for Tape Library		No.				<i>y</i>						
Sub Total												
Spares												
Spares to maintain agreed performance level												
Total				7								
Software												
Software License - Application												
AMR based Meter Data Acquisition & Analysis Software	SÍ	No.										



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Item description	Type (Refer SRS Document for exact Technical Specificatio	Unit	Qua ntit y	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Energy Audit Software		No.						N				
New Connection & Disconnection Management System		No.										
GIS Application		No.										
GIS based Integrated Network Analysis Software		No.										
Management Information System Software		No.										
Identify & Access Management System Software		No.		5								
MBC Software		No.	A									
Asset Management System Software												
Maintenance Management System Software				Y								
Sub Total												
Misc Software & Solutions												
Enterprise Management System (EMS) Solution	0,	No.										
Messaging Solutions		No.										





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											Y	
Item description	Type (Refer SRS Document for exact Technical Specificatio	Unit	Qua ntit y	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Directory Software		No.										
SPAM Filter		No.										
IDS & Firewall System		No.										
Development of Web portal and web self service		No.					\mathcal{O}					
Sub Total												
Basic Software License												
Software Licenses- Server OS		No.										
Software Licenses- Anti Virus		No.										
Software Licenses- Databases		No.	~									
Sub Total												
Total												
Bandwidth Charges												
Network Connectivity Charges for Primary Link Connectivity to the MPLS-VPN cloud	Minimum 20 Mbps											



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											Y	
Item description	Type (Refer SRS Document for exact Technical Specificatio	Unit	Qua ntit y	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Network Connectivity Charges for Secondary Link Connectivity to the MPLS-VPN cloud	Minimum 20 Mbps											
Network connectivity to Internet Gateway for Primary Link	Minimum 10 Mbps					S						
Network connectivity to Internet Gateway for Secondary Link from different ISP	Minimum10 Mbps				Ś							
Total												
Implementation Cost												
Development of Commercial database of consumers and Data migration work as per the requirement of utility	25											



ALL TOP

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Item description	Type (Refer SRS Document for exact Technical Specificatio	Unit	Qua ntit y	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Installation, Testing and Commissioning/ Customization Cost												
Total												
Grand Total												

Total Data Centre Cost (A) = _____

Form 2: Customer Care Centre cost

Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Uni t	Quanti ty	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
				Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Hardware/ Equipment												
Server Hardware												
Application Server	\sim	No.										
Sub Total												



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											1	
Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Uni t	Quanti ty	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
Customer Care related Equipments												
Hand Set		No.										
Head Set		No.						/				
Call Switching Equipment		No.										
IVRS (Interactive Voice Response System) server		No.					/					
CTI (Computer telephony Integration) server		No.			\mathbf{S}							
Automatic Call Distributor		No.										
Dialer		No.	A									
Soft telephone		No.	K									
Sub Total												
Server Racks												
IDF/MDF Wall Mount Racks		No.										
IDF/MDF Floor Mount Racks		No.										
Sub Total												
Switches												
Layer II Switch		No.										
Sub Total												





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			RFP Docu			OF IT IMPLEN		GENCY				
Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Uni t	Quanti ty	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
Routers												
Router for MPLS/ VPN Network		No.		mer Care uter not re		located ir	the same	e premises	of Data C	entre and	l linked th	rough
Sub Total												
Cabling System												
Cables, Jacks etc.		lot				Ŝ						
Sub Total												
UPS & Battery System												
2 /5 KVA UPS		No.										
Sub Total												
IP Telephony												
IP PBX		No.	-		<i>y</i>							
IP Phones		No.										
Sub Total												
Workstation & Printers												
Workstation PC (including, Computer chair, table etc.)		No.										
Dot Matrix Printers		No.										
Network LaserJet (B/W) Printer	<u>Q'</u>	No.										
Line printer		No.										

TAMIL NADU ELECTRICITY BOARD



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Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Uni t	Quanti ty	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
Sub Total									· · · · · · · · · · · · · · · · · · ·			
Machines												
Touch Screen KIOSK		No.										L
IDMS along with Automatic Token Dispenser Machine		No.						×				
Cash/ Cheque Collection KIOSK		No.										
Sub Total												L
Spares												
Spares to maintain agreed performance level		Rs.										
Total												
												L
Software												
												<u> </u>
Software License - Application												
Automated Call		1										
Distribution Software												
Computer Telephony Integration												
Software	X											l
Answering Service												



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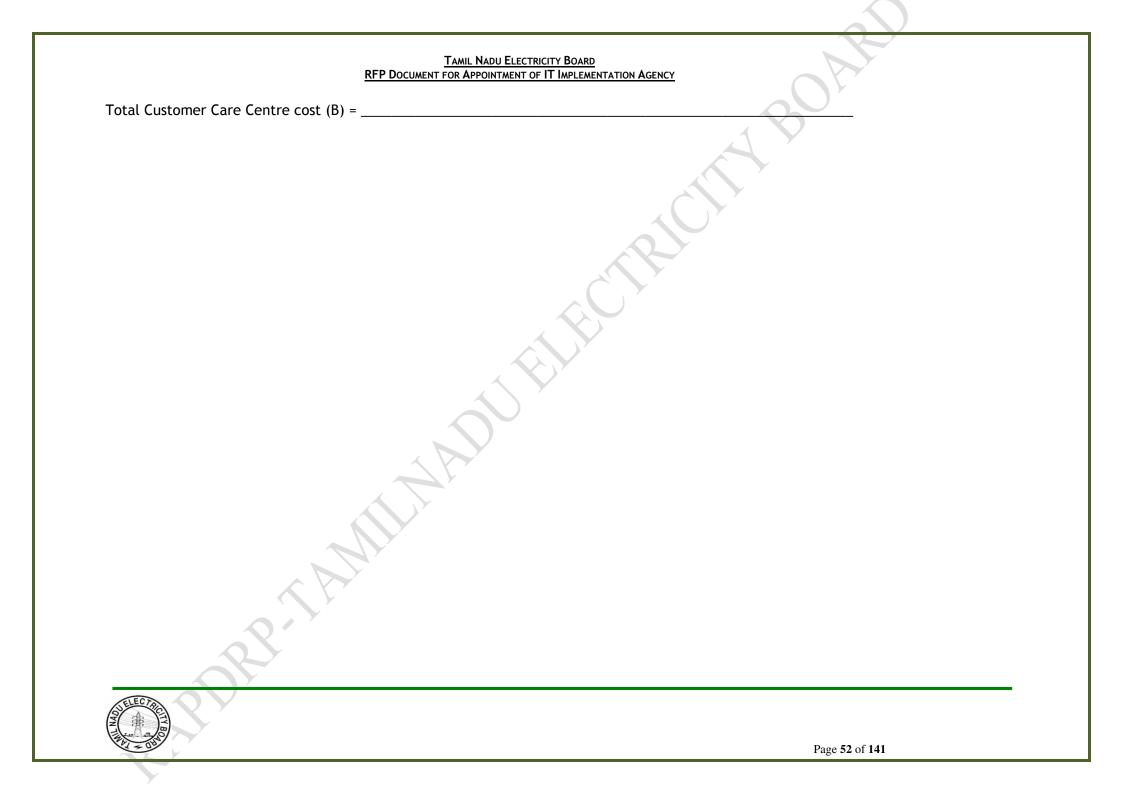
TAMIL NADU ELECTRICITY BOARD RFP DOCUMENT FOR APPOINTMENT OF IT IMPLEMENTATION AGENCY

											1	
Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Uni t	Quanti ty	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
Software												
Interactive Voice Response Software												
Softphone Software												
Voice Broadcasting Software												
Sub Total												
Basic Software License												
Software Licenses- Server OS						$\mathbf{O}^{\mathbf{r}}$						
Software Licenses- Databases												
Sub Total												
Total												
Implementation Cost												
			$\overline{\mathbf{A}}$									
Installation, Testing and Commissioning/ Customization Cost		Rs.										
Total												
Grand Total												





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Form 3: Sub-division Offices cost

	<u> </u>	RFP Do	<u>Ta</u> CUMENT FOI	MIL NADU E R Appointm	ELECTRICIT ENT OF IT	<u>y Board</u> Implement	ATION AGEN	<u>1CY</u>			A	
Form 3: Sub-division (Offices cost								A	6		
Item Description	Type (Refer SRS Document for exact Technical Specification	Un it	Quan tity	FOB (per unit)	Freig ht & Insur ance (per unit)	Excis e Duty	Excis e Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	s)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Hardware/ Equipment Data Acquisition Server with Front End Processor		No.		oroposed a Centre		cture Cei	ntralised	Data Ac	quisition	Server is	include	d in
Sub Total												
Switches												
Layer II Switch		No.										
Sub Total												
Routers												
Router for MPLS/ VPN Network		No.	SY									
Sub Total												
Cabling System												
Cables, Jacks etc.		lot										
Workstation / Equipment Cords	S.F.	lot										
Sub Total												



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	-											
Item Description	Type (Refer SRS Document for exact Technical Specification	Un it	Quan tity	FOB (per unit)	Freig ht & Insur ance (per unit)	Excis e Duty	Excis e Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	s)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Hardware for AMR based Data Logging System												
Data Converter Unit (At Sub-Station)							<					
Cabling, connectors and other required hardware												
Sub Total												
Modems for AMR System**												
PSTN Modem						. N	lot requ	ired				
GSM Modem							lot requ					
GPRS Modem					$\mathbf{)}$							
CDMA Modem						N	lot requ	ired		•		
EDGE Modems												
Sub Total			\mathbf{x}									
Spot Billing System												
Hand Held Spot Billing Equipment connected with Portable Printer												
Sub Total												
UPS & Battery System												
2 /5 kVA UPS												
Sub Total												
IP Telephony												
IP PBX												
IP Phones												
Sub Total												



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Workstation PC (including Computer chair, table etc.) Workstation PC (including UPS, Computer chair, table etc.) - (For Sub- Station) Dot Matrix Printers Stip Printer Network LaserJet (B/W) Printer A4 Size Inkjet / Bubble Jet printer A3 Size Inkjet Color Printer Line Printer Bar Code Reader Sub Total Spares Spares to maintain agreed performance level Total		-										
Workstation PCs, Printers Image: Constraint of the second sec	Item Description	SRS Document for exact Technical Specification		(per unit)	ht & Insur ance (per unit)	e Duty	e Duty (per unit)	VAT	& other taxes (per unit)	other levies (per	Cost (per unit)	Cost
& Others Workstation PC (including Computer chair, table etc.) Workstation PC (including UPS, Computer chair, table etc.) - (For Sub- Station) Dot Matrix Printers Dot Matrix Printers Slip Printer Network LaserJet (B/W) Printer A4 Size Inkjet / Bubble Jet printer A3 Size Inkjet Color Printer Bar Code Reader Sub Total Spares to maintain agreed performance level		s)		Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Computer chair, table etc.) Workstation PC (including UPS, Computer chair, table etc.) - (For Sub- Station) Dot Matrix Printers Slip Printer Network LaserJet (B/W) Printer A4 Size Inkjet / Bubble Jet printer A3 Size Inkjet Color Printer Line Printer Bar Code Reader Sub Total Spares Spares Spares to maintain agreed performance level Total Mot required Mot required Spares S	& Others											
UPS, Computer chair, table etc.) - (For Sub- Station) Image: Station of the state stat	Computer chair, table etc.)						$\langle \rangle$					
Slip Printer Not required Network LaserJet (B/W) Printer A4 Size Inkjet / Bubble Jet Not required printer Not required A3 Size Inkjet Color Printer Printer Not required Bar Code Reader Not required Sub Total Image: Spares Spares Image: Spares Spares Image: Spares Spares Image: Spares Spares Image: Spares Total Image: Spares	Workstation PC (including UPS, Computer chair, table etc.) -(For Sub- Station)											
Network LaserJet (B/W) Printer A4 Size Inkjet / Bubble Jet printer A3 Size Inkjet Color Printer Line Printer Bar Code Reader Sub Total Spares Spares to maintain agreed performance level Total	Dot Matrix Printers				$\langle \rangle$							
Printer A4 Size Inkjet / Bubble Jet printer A3 Size Inkjet Color Printer Line Printer Bar Code Reader Sub Total Spares Spares Spares to maintain agreed performance level Total	Slip Printer			~			Not re	quired				
printer A3 Size Inkjet Color Printer Line Printer Bar Code Reader Sub Total Spares Spares to maintain agreed performance level Total	Network LaserJet (B/W) Printer											
A3 Size Inkjet Color Printer Line Printer Bar Code Reader Sub Total Spares Spares to maintain agreed performance level Total	A4 Size Inkjet / Bubble Jet printer						Not re	quired				
Bar Code Reader Not required Sub Total Not required Spares Image: Constraint agreed performance level Image: Constraint agreed performance level <td>A3 Size Inkjet Color Printer</td> <td></td> <td>AY</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	A3 Size Inkjet Color Printer		AY									
Sub Total Image: Constraint of the second	Line Printer											
Spares Image: Constraint agreed performance level Image: Constragreed performance level Image: Constraint agreed p	Bar Code Reader						Not re	quired				
Spares to maintain agreed performance level Image: Constraint of the second	Sub Total											
performance level Image: Constraint of the second	Spares											
	Spares to maintain agreed performance level											
Software	Total											
Software												
	Software											

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	Ē	RFP Do			ELECTRICITY MENT OF IT		ATION AGEI	NCY			P	
Item Description	Type (Refer SRS Document for exact Technical Specification	Un it	Quan tity	FOB (per unit)	Freig ht & Insur ance (per unit)	Excis e Duty	Excis e Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	s)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Software License - Application												
Meter Data Acquisition & Analysis Software				proposec a Centre		cture Ce	entralised	l Data Ao	cquisitior	ı Server i	s include	ed in
Sub Total												
Basic Software License												
Software Licenses-Server OS				proposec a Centre		cture Cei	ntralised	Data Ac	quisition	Server is	include	d in
Software Licenses- Databases				proposec a Centre		cture Cei	ntralised	Data Ac	quisition	Server is	include	d in
Sub Total												
Total												
Bandwidth Charges												
Network Connectivity Charges for Primary Link Network Connectivity to MPLS-VPN cloud	Minimum 512 Kbps		A									
Network Connectivity Charges for Secondary Link	Not Required											
Total		7										
Implementation Cost												
Installation, Testing and Commissioning/	·											



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RFP DOCUMENT FOR APPOINTMENT OF IT IMPLEMENTATION AGENCY Freig Type (Refer Sales Excis Any ht & Total SRS £ FOB other Excis е other Document Un Insur CST/ Cost Total **Item Description** levies Quan (per Duty е it VAT (per Cost for exact taxes ance unit) tity Duty (per (per Technical (per unit) (per unit) unit) Specification unit) unit) % Rs. % S) Rs. Rs. Rs. Rs. Rs. Rs. Customization Cost*** Total Grand Total

TAMIL NADU ELECTRICITY BOARD

Total other offices cost (C) = _____

Form 4: Other Offices cost

Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Un it	Qua ntity	FOB (per unit)	Frei ght & Insur ance (per unit)	Exci se Duty	Exci se Duty (per unit)	CST/ VAT	Sale s & othe r taxe s (per unit)	Any othe r levie s (per unit)	Tota l Cost (per unit)	Tota l Cost
				Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
\sim												
Hardware/ Equipment												



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Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Un it	Qua ntity	FOB (per unit) Rs.	Frei ght & Insur ance (per unit) Rs.	Exci se Duty %	Exci se Duty (per unit) Rs.	CST/ VAT %	Sale s & othe r taxe s (per unit) Rs.	Any othe r levie s (per unit) Rs.	Tota l Cost (per unit) Rs.	Tota l Cost Rs.
Switches				N5.	Ν3.	70	Ν.5.	70	11.5.	Ν3.	Ν3.	Ν3.
Layer II Switch Sub Total								7				
							. Y					
Routers Router for MPLS/ VPN Network					· · · · · ·							
Sub Total												
Cabling System												
Cables, Jacks etc.												
Workstation / Equipment Cords			X	5)							
Sub Total		X										
UPS & Battery System												
2 /5 KVA UPS			×									
Sub Total												
Workstation PCs, Printers & Others												
Workstation PC (including												
Computer chair, table etc.)												
Dot Matrix Printers												
A4 Size Inkjet / Bubble Jet printer	Y					N	ot requi	red				
Line Printer						N	ot requi	red				



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Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Un it	Qua ntity	FOB (per unit)	Frei ght & Insur ance (per unit)	Exci se Duty	Exci se Duty (per unit)	CST/ VAT	Sale s & othe r taxe s (per unit)	Any othe r levie s (per unit)	Tota l Cost (per unit)	Tota l Cost
				Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Bar Code Reader												
Sub Total												
Machines												
Touch Screen KIOSK							Not re	quired			•	
Cash/ Cheque Collection KIOSK						\mathbf{N}						
Sub Total												
Spares												
Spares to maintain agreed performance level												
Total												
			1									
Bandwidth Charges												
Network Connectivity Charges for Primary Link Network Connectivity to MPLS-VPN cloud	512 Kbps											
Network Connectivity Charges for Secondary Link	Not Applicable											
Total												
Implementation Cost												



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Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Un it	Qua ntity	FOB (per unit)	Frei ght & Insur ance (per unit)	Exci se Duty	Exci se Duty (per unit)	CST/ VAT	Sale s & othe r taxe s (per unit)	Any othe r levie s (per unit)	Tota l Cost (per unit)	Tota l Cost
				Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Installation, Testing and Commissioning/ Customization Cost**												
Total												
Grand Total												

Total other offices cost (D) = _____

Form 5: Cost of DGPS Survey, Consumer Indexing & Asset Mapping

ltem No.	Description	Unit	Qty.	Unit Price (Rs.)	Total Price (Rs.)
1.0	Procurement of Satellite Imagery and creation of Base Map of project area.	Sq. Km.			
2.0	Locating co-ordinates (Latitude-Longitude) using DGPS, collection/updation of attribute database of following electrical network assets through field survey and development, codification & indexing with their upstream source of supply:	Nos.			
a)	66/33, 66/11, 33/11 kV substations	Nos.			
b)	HT (66, 33, 11 kV) overhead lines/underground cables alongwith associated line equipments such as Poles, RMUs, Distribution Transformers, Capacitors etc.	Kms			
c)	LT overhead lines and underground cables alongwith associated equipments such as	Kms.			



	poles, feeder pillar boxes etc.		
3.0	Collection/updation of consumer attribute database through door-to-door field survey and development, codification & indexing of the consumers with respective upstream source of supply (poles/feeder pillar boxes/etc.).	Nos.	
4.0	Preparation of digitized electrical network on the base map in the pre-defined scale with features and attributes of assets and consumers collected through DGPS/door- to-door survey for GIS application.	Sq. Km.	

* Taxes & Duties should include CST, VAT, Sales Tax, Service Tax, Entry Tax, Excise Duty etc.

Total Cost of DGPS Survey, Consumer Indexing & Asset Mapping (E) =

Form 6: Project Management Cost

Supplier shall quote the implementation cost till the Enterprise-wide rollout of the complete solution (Integrated solution, WAN/ LAN) in the given format. The implementation cost should include all services as specified in Appendix L.

Project Management Cost Including all Taxes & Duties	Unit	
Project Execution Related Cost		
Installation, Testing and Commissioning Cost to Integrate Entire IT Infrastructure	Rs.	
Integration with legacy applications & Data Migration	Rs.	
Training for the Employees	Rs.	
Total	Rs.	



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* Project management cost include CST, VAT, Sales Tax, Service Tax, Excise Duty etc.

Total Project Management Cost (F) = _____

Form 7: Disaster Recovery Centre Cost

Refer to clause 22 of Section G3 of SRS document for the detail scope of work related to the Disaster Recovery Centre.

Item description	Type (Refer SRS Document for exact Technical Specificatio	Un it	Quanti ty	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
Henderson (ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Hardware/ Equipment												
Server Hardware												
Database Server for GIS in cluster fail- over Mode		No		7								
Database Server for other applications in cluster fail-over Mode		No ·										
GIS Application Server	0 ' ^y	No										
Application Server for others	2	No										



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											Y	
Item description	Type (Refer SRS Document for exact Technical Specificatio	Un it	Quanti ty	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Data Acquisition Server		No										
Testing, Development & QA Server		No										
Access Control Server		No										
Anti-Virus Server		No										
DNS Server		No										
LDAP Server		No			(
Web Server		No			\mathbf{D}							
Reverse Proxy Server		No			7							
EMS/NMS Server with Network Operation Console		No										
Mail/ Messaging Server		No										
Sub Total			1									
Workstation PC (Computer chair, table etc.)		No										
Sub Total												
Storage & Backup												





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Item description	Type (Refer SRS Document for exact Technical Specificatio	Un it	Quanti ty	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Devices												
SAN storage Fiber Channel SAN		No No						2				
switch		•						/				
SAN Cabling		Set										
Backup Server		No										
Tape Library		No										
Other Storage Device		No										
Sub Total												
Server Racks												
IDF/MDF Wall Mount Racks		No										
IDF/MDF Floor Mount Racks		No										
Sub Total												
Switches												
Core Switch		No										
Access Switch		No										
Distribution Switch	0/Y	No										
Layer II Switch		No										





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Item description	Type (Refer SRS Document for exact Technical Specificatio	Un it	Quanti ty	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Sub Total												
Routers												
Router for MPLS/ VPN Network		No										
Router for Internet Gateway		No					()	r				
Sub Total												
Cabling System												
Cables, Jacks etc.		Lot										
Fiber Optical Cable, Connectors, Patch Cord etc.		Lot			5							
Sub Total			,		7							
UPS & Battery System												
Critical Load UPS		No										
Service Load UPS		No										
Sub Total			1									
Printers & Others												
Network LaserJet (B/W) Printer		No										
Media for DAT drive		No										



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											Y	
Item description	Type (Refer SRS Document for exact Technical Specificatio	Un it	Quanti ty	FOB (per unit)	Freigh t & Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Blank Cartridges for Tape Library Sub Total		No										
Spares												
Spares to maintain agreed performance level												
Total												
<i>c. c.</i>												
Software												
Software License - Application				nterprise be requi		s propose	ed for Da	ta Centre	, The sep	arate Lico	ense for t	his item
AMR based Meter Data Acquisition & Analysis Software		No										
Energy Audit Software		No										
New Connection & Disconnection Management System	5	No										
GIS Application		No										



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Integrated Network Analysis Software No Management Information System Software No Identify & Access Management No System Software No WBC Software . Asset Management Maintenance . Management System Software . MBC Software . Software . MBC Software . Software . Management System Software . Maintenance . Management System Software . Maintenance . Management System Software . Solutions . Enterprise Management System (EMS) Solutions . Directory Software . No .											Y	
GIS based No No Analysis Software No Management No No Software Software <t< th=""><th>Item description</th><th>SRS Document for exact Technical</th><th></th><th>(per</th><th>t & Insura nce (per</th><th></th><th>Duty (per</th><th></th><th>& other taxes (per</th><th>other levies (per</th><th>Cost (per</th><th></th></t<>	Item description	SRS Document for exact Technical		(per	t & Insura nce (per		Duty (per		& other taxes (per	other levies (per	Cost (per	
Integrated Network Analysis Software NO Management Information System Software No Information System Software No Jdentify & Access Management No System Software No WBC Software . Asset Management Maintenance . Management System Software . Maintenance . Management System Software . Software . Maintenance . Management System Software . Software . Sub Total . Management System (EMS) Solutions . Directory Software . No . No . No .				Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Information System NO Software · Identify & Access Management System Software · MBC Software · Asset Management System Software Maintenance Management System Software System Software Management System Software System Software Management System Software System Software Sub Total Misc Software & Solutions Enterprise Management System (EMS) Solution No Messaging Solutions · No Directory Software No	GIS based Integrated Network Analysis Software											
Management NO System Software No MBC Software No Asset Management System Software Asset Management System Software Maintenance Management System Software System Software Management System Software Management System Software Management System Software Sub Total Misc Software & Solutions Enterprise Management System (EMS) Solutions No Directory Software No	Information System Software		No			~						
MBC Software . <t< td=""><td>Identify & Access Management System Software</td><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Identify & Access Management System Software		•									
System Software Image: Constraint of the system of the system software Image: Constraint of the system software Image: Con	MBC Software		No									
Management System Software Image Management System Software Image Management Solutions Image Management Solutions Image Management Solutions Image Management Solutions Image Management Solution Image Management So	System Software					7						
Misc Software & Solutions Image: Constraint of the second	Maintenance Management System Software											
Solutions Image: Constraint of the second secon	Sub Total											
Management System (EMS) Solution No Image: Constraint of the system of th	Misc Software & Solutions											
Messaging Solutions . . . Directory Software . . .	Enterprise Management System (EMS) Solution		No									
Directory Software . . . No . . .	Messaging Solutions		Y									
	Directory Software	~ · · ·	•									
	SPAM Filter		No									



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Item description	Type (Refer SRS Document for exact	Un it	Quanti ty	FOB (per unit)	Freigh t & Insura nce	Excise Duty	Excise Duty (per	CST/ VAT	Sales & other taxes	Any other levies (per	Total Cost (per	Total Cost
	Technical Specificatio		cy	anne)	(per unit)		unit)		(per unit)	unit)	unit)	
	ns)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
IDS & Firewall System		No										
Development of Web portal and web self service		No						Y				
Sub Total												
Basic Software License												
Software Licenses- Server OS		No										
Software Licenses- Anti Virus		No										
Software Licenses- Databases		No		nterprise be requi		s propose	d for Dat	ta Centre	, The sep	arate Lice	ense for t	his item
Sub Total												
Total					r"							
Grand Total			K									

TAMIL NADU ELECTRICITY BOARD RFP DOCUMENT FOR APPOINTMENT OF IT IMPLEMENTATION AGENCY

Total Disaster Recovery Centre Cost (G) =



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Total Project Area Cost

Nature of Costs		Total (Rs. Cr.)
1		
Form 1: Data Centre Cost	(A)	
Form 2: Customer Care Centre Cost	(B)	
Form 3: Sub-division Offices Cost	(C)	
Form 4: Other Offices Cost	(D)	
Form 5: DGPS Survey	(E)	
Form 6: Project Management Cost	(F)	
Form 7: Disaster Recovery Centre Cost	(G)	
Total (A)+(B)+(C)+(D)+(E)+(F)+(G)		

D.3.2 Project Area without Data Centre & Customer Care Centre

Bidder should use Appendix F to fill following information:

Name of Project Area (town):-	
Number Subdivision Offices under the Project Area:-	
Number of Other Offices under the Project Area:-	

Following formats should be repeated for all the Project Areas (other then the Project Area with Data Centre and Customer Care Centre).



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Form 3: Sub-division Office Cost

Bidder shall fill following	-						separate		,	0		
Form 3: Sub-division Off	ice Cost								1			
Item Description	Type (Refer SRS Document for exact Technical Specification	Un it	Quan tity	FOB (per unit)	Freig ht & Insur ance (per unit)	Excis e Duty	Excis e Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	s)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Hardware/ Equipment												
Data Acquisition Server with Front End Processor		As pe Cent		ed archi	tecture (Centralis	ed Data /	Acquisiti	on Serve	r is inclu	ded in th	e Data
Sub Total												
Switches												
Layer II Switch												
Sub Total					\mathcal{D}							
Routers												
Router for MPLS/ VPN Network												
Sub Total												
Cabling System												
Cables, Jacks etc.		lot.										
Workstation / Equipment Cords	1 AV	lot										
Sub Total												
Hardware for AMR based Data Logging System												



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Item Description	Type (Refer SRS Document for exact Technical Specification	Un it	Quan tity	FOB (per unit)	Freig ht & Insur ance (per unit)	Excis e Duty	Excis e Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost	
	s)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.	
Data Converter Unit													
Cabling, connectors and other required hardware							R						
Sub Total								1					
Modems for AMR System**													
PSTN Modem	Not required												
GSM Modem	Not required												
GPRS Modem													
CDMA Modem	Not required												
EDGE Modems													
Sub Total													
Spot Billing System													
Hand Held Spot Billing Equipment connected with Portable Printer			P										
Sub Total													
UPS & Battery System													
2 / 5 KVA UPS													
Sub Total													
IP Telephony													
IP PBX													
IP Phones	\wedge												
Sub Total													
Workstation PCs, Printers & Others													



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Item Description	Type (Refer SRS Document for exact Technical Specification	Un it	Quan tity	FOB (per unit)	Freig ht & Insur ance (per unit)	Excis e Duty	Excis e Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	s)			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Workstation PC (including Computer chair, table etc.) for Office							Ś.	2				
Workstation PC (including UPS, Computer chair, table etc.) for Sub-station												
Dot Matrix Printers												
Slip Printer							Not re	quired				
Network LaserJet (B/W) Printer					$\langle \rangle$							
A4 Size Inkjet / Bubble Jet printer				~	Y		Not re	quired				
A3 Size Inkjet Color Printer												
Line Printer			1									
Bar Code Reader			$\langle X \rangle$				Not re	quired				
Sub Total												
Spares												
Spares to maintain agreed performance level												
Total	Ž											
Software												
Software License -	<u> </u>											
Application									on Serve			



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	<u> </u>		LUMENT FUI	APPUINT	NENT OF TI	IMPLEMENT	ATION AGE					
Item Description	Type (Refer SRS Document for exact Technical Specification	Un it	Quan tity	FOB (per unit)	Freig ht & Insur ance (per unit)	Excis e Duty	Excis e Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
	s)	6		Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Analysis Software		Cent	re.	1		1			1	1		
Sub Total												
Basic Software License												
Software Licenses-Server OS		As pe Cent		ed archi	tecture	Centralis	ed Data /	Acquisiti	on Serve	r is inclu	ded in th	e Data
Software Licenses- Databases		As pe Cent		ed archi	tecture	Centralis	ed Data /	Acquisiti	on Serve	r is inclu	ded in th	e Data
Sub Total												
Total												
Bandwidth Charges												
Network Connectivity Charges for Primary Link Connectivity to MPLS-VPN Cloud	Minimum 512 Kbps											
Network Connectivity Charges for Secondary Link	Not Required											
Total												
Implementation Cost												
Installation, Testing and Commissioning/ Customization Cost***												
Total												
Grand Total												





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TAMIL NADU ELECTRICITY BOARD RFP DOCUMENT FOR APPOINTMENT OF IT IMPLEMENTATION AGENCY Form 4: Other Offices Cost												
ltem Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Un it	Qua ntity	FOB (per unit)	Frei ght & Insur ance (per unit)	Exci se Duty	Exci se Duty (per unit)	CST/ VAT	Sale s & othe r taxe s (per unit)	Any othe r levie s (per unit)	Tota l Cost (per unit)	Tota l Cost
				Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
Hardware/ Equipment												
Switches												
Layer II Switch						~						
Sub Total												
Routers												
Router for MPLS/ VPN Network												
Sub Total												
Cabling System												
Cables, Jacks etc.												
Workstation / Equipment Cords												
Sub Total												
UPS & Battery System												
2 /5 KVA UPS	Y											
Sub Total	Y											
Workstation PCs, Printers & Others												



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Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Un it	Qua ntity	FOB (per unit)	Frei ght & Insur ance (per unit) Rs.	Exci se Duty %	Exci se Duty (per unit) Rs.	CST/ VAT %	Sale s & othe r taxe s (per unit) Rs.	Any othe r levie s (per unit)	Tota l Cost (per unit)	Tota l Cost
Workstation PC (including				Rs.	RS.	70	KS.	70	KS.	Rs.	Rs.	Rs.
Computer chair, table etc.)												
Dot Matrix Printers						C						
A4 Size Inkjet / Bubble Jet printer					/		Not re	quired				
Line Printer												
Bar Code Reader					$ \land $							
Sub Total					\mathbf{N}							
Machines												
Touch Screen KIOSK)		Not re	quired				
Cash/ Cheque Collection KIOSK				$\mathbf{D}^{\mathbf{r}}$								
Sub Total		~										
Spares												
Spares to maintain agreed performance level												
Total												
Bandwidth Charges												
Network Connectivity Charges for Primary Link Network Connectivity to MPLS-VPN cloud	Minimum 512 Kbps											
Network Connectivity Charges	Not											



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Item Description	Type (Refer SRS Document for exact Technical Specificatio ns)	Un it	Qua ntity	FOB (per unit)	Frei ght & Insur ance (per unit)	Exci se Duty	Exci se Duty (per unit)	CST/ VAT	Sale s & othe r taxe s (per unit)	Any othe r levie s (per unit)	Tota l Cost (per unit)	Tota l Cost
				Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
for Secondary Link	Required											
Total												
Implementation Cost												
Installation, Testing and Commissioning/ Customization Cost**												
Total												1
Grand Total					/							<u> </u>
Form 5: DGPS Survey Cost	1	~	R		1	1	1	1	1	1	1	1

Form 5: DGPS Survey Cost

Item Description	Uı t	ni Quanti ty	FOB (per unit)	Freigh t& Insura nce (per unit)	Excise Duty	Excise Duty (per unit)	CST/ VAT	Sales & other taxes (per unit)	Any other levies (per unit)	Total Cost (per unit)	Total Cost
			Rs.	Rs.	%	Rs.	%	Rs.	Rs.	Rs.	Rs.
		/									
GPS survey (Field survey)											
Technical audit of	No	•									



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substations								
Technical audit of		l l				<u>р</u>		
distribution transformer	No.							
Locating co-ordinates								
(Latitude-Longitude) and							<i>Y</i>	
mapping of electrical						\wedge		
network entities from								
66kV/33 kV system to								
source of supply (i.e.								
poles/feeder pillar boxes								
(over/under ground)) of								
each consumer and other								
features using Differential					<i>Y</i>			
Global Positioning System								
method.	No.							
Building of GIS network	Km.							
Base maps(municipal map								
,or SOI maps, satellite			×					
imageries)								
Geo-referencing &								
Digitization of power			$\langle \rangle$					
distribution network,								
entities and features		\checkmark ∇						
including consumers on			4					
base map	Km.							
Collection and								
development of attribute								
data of each network								
entity and mapped								
feature	Km.							
Collection of consumer	$\wedge \nabla$							
data through field survey.	No.							
Integration of consumer								
data with GIS network	No.							
Total								



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Form 6: Project Management Cost

		Project Area wise Cost								
Project Management Cost Including all Taxes & Duties	Unit	Project Area 1	Project Area 2	Project Area 3	Project Area 4	Project Area 5	Total			
Project Execution Related Cost										
Installation, Testing and Commissioning Cost to Integrate Entire IT Infrastructure	Rs.									
Integration with legacy applications & Data Migration	Rs.									
Training for the Employees	Rs.									
Total	Rs.									
* Project management cost include CST, VAT, Sales Tax, S	ervice Tax,	Entry Tax,	Excise Duty	etc.						

Total Project Area Cost

Nature of Costs		Total (Rs. Cr.)
1		
Form 3: Sub-division Offices Cost	(C)	
Form 4: Other Offices Cost	(D)	
Form 5: DGPS Survey	(E)	
Form 6: Project Management Cost	(F)	
Total (C)+(D)+(E)+(F)		

Total Cost of Project Area = Rs. _____



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D.3.3 FMS Charges

			Time shall start just after entire project Go Live										
FMS Charges		Year 1	Year 2	Year 3	Year 4	Year 5	Total						
FMS Charges	Rs.						0.00						

Total FMS Charges (G) = _____

D.3.4 Total Cost Summary

Costs		Total (Rs. Cr.)
1	/	
Project Area with Data Centre & Customer Care Centre Cost	(1)	
Project Area without Data Centre & Customer Care Centre Cost 1	(2)	
Project Area without Data Centre & Customer Care Centre Cost 2	(3)	
	(4)	
Total FMS Charges	(5)	
Total		

Total Cost of ownership (1+2+3+4+5) = Rs. _____

Price proposals will be compared based on the Total cost of ownership mentioned above.



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D.4 Checklists

Please submit a copy of this section with cover letter while submitting the proposal.

D.4.1 Mandatory forms that needs to be submitted

S.No.	ltem	Furnished
1	Documents against eligibility criteria	Yes/ No
2	Bid Security	Yes/ No
3	One original copy duly signed- Technical Proposal	Yes/ No
4	Four copies of Technical Proposal - Hard copies	Yes/ No
5	Five copies of Technical Proposal - Soft copies	Yes/ No
6	One original copy duly signed- Price proposal	Yes/ No
7	Four copies of Financial Proposal - Hard copies	Yes/ No
8	Five copies of Financial Proposal - Soft copies	Yes/ No
9	Proof of turnover and networth for the last three audited financial years of Bidder, consortium member (if any) and sub-contractors	Yes/ No
10	CV of key personnel in suggested format	Yes/ No
11	Proposed SLA template	Yes/ No
12	Filled-in copy of Bidding forms (Section V)	Yes/ No
13	Receipt of purchase of tender	Yes/ No

Table 17: Check List for Mandatory Forms

D.4.2 Compliance checklist

Table 18: Check List for proper Documentation & Compliance

S.No.	ltem	Furnished
1	Please confirm you agree to all clauses specified in the Section II, ITB	Yes/ No
2	Please confirm you have submitted all the mandatory forms specified in Appendix D (Technical & Financial Proposal)	Yes/ No
3	Please confirm you have noted the bid submission deadline specified in Section III, BDS (ITB 23.1)	Yes/ No
4	Please confirm you have noted that the performance security will be	Yes/ No



1			
		TAMIL NADU ELECTRICITY BOARD RFP DOCUMENT FOR APPOINTMENT OF IT IMPLEMENTATION AGENCY	
		furnished within time period as specified in Section II, ITB clause 42.1	
	5	Please confirm you have provided all document proof to substantiate you qualifying the eligibility criteria as mentioned in Section IV	Yes/ No
	6	Please confirm you have complied with the proposed solution architecture specified in SRS Document	Yes/ No
	7	Please confirm you have complied with all services specified in the scope of services mentioned in Section VI	Yes/ No
	8	Please confirm that you comply with all clauses specified in the General Conditions of Contract specified in Section VII	Yes/ No
	9	Please confirm that you comply with all clauses specified in the Special Conditions of Contract specified in Section VIII	Yes/ No
	10	Please confirm that all goods (software and hardware) and services have been included in the price proposal and is complete in all respects without any deviation/ missing items	Yes/ No
	11	Please confirm that you have not submitted any alternate proposal	Yes/ No
	12	Please confirm that you have noted the SLA guidelines and penalty clauses applicable as specified in Appendix C.	Yes/ No
	13	Please confirm you have provided sufficient Bid security in proper form as specified in clause 20, Section II ITB	Yes/ No
	14	Please confirm you have responded to all mandatory technical specification given in Appendix A	Yes/ No
	15	Please confirm you have responded to all technical specifications (applications) given in the Appendix B.1	Yes/ No
	16	Please confirm you have responded to all technical specifications (hardware) given in the Appendix B.2	Yes/ No
	17	Please confirm that you have checked the final quote provided in Appendix D (Price Proposal)	Yes/ No
PDR	~		



E Appendix E - Evaluation Methodology

- Alternate bids are not allowed
- Only bids from empanelled (by the nodal agency) bidders shall be evaluated
- The evaluation team will thoroughly review the proposals submitted by various bidders / consortiums. The broad evaluation will be based as following:-
 - Technical Proposal: 50% Weight
 - Price Proposal: 50% Weight
- Pre-demo meetings will be conducted with all the bidders
- The Metering, Billing, Collection modules of the software solution being offered by the ITIA must have been proven and tested for robustness, scalability and functionality in large power distribution utility environment. These applications shall either be standard OEM products or developed /productized applications of the ITIA, with proven track record. The application must have implemented in atleast one power distribution utility worldwide in a WAN environment. The implementation certificate should be provided for the same.

Qualifying Requirement for MBC application

In case SI is not providing MBC application of his own / developed by him, the following QR is applicable for outsourced solution-

1. The MBC application is available as off the shelf product of an OEM and have been implemented and successfully under operation for a period of at least 1 years for at least five lakhs consumers in utility. The solution should be running on a web based centralized WAN environment. The bidder should produce a copy of certificate for successful completion of user acceptance test.

OR

In case the offered MBC solution is not from an OEM then the bidders (SI) have an option to supply customized solution implemented in any of the Indian power utilities and it should meet the following condition:

The application must be under operation for at least 3 years in Indian power utilities for a consumer base of 10 lakhs covering Domestic, Non-domestic and HT consumers and the solution, should be running on a web based centralized WAN environment at least for a period of one year.

2. The software which work only in decentralized environment (spot billing applications) shall not be considered

3. The bidder must provide documentary evidences including screen shots describing functionalities of the proposed solution and certificate from the purchaser / owner regarding successful operation of the implemented application.



- Each of the bidder will be requested to demonstrate the product and services
- The technical evaluation will commence post the demonstrations
- Based on multiple parameters, the evaluation team will calculate the technical evaluation score for each Supplier at the end of this phase
- Utility, in observance of best practices, shall:
 - Maintain the bid evaluation process strictly confidential
 - Reject any attempts or pressures to distort the outcome of the evaluation, including fraud and corruption
 - Strictly apply only and all of the evaluation and qualification criteria specified in the Bid document

E.1 Single-Stage: Two-Envelope Bidding Procedure

In the Single-Stage: Two-Envelope bidding procedure, Bidders should submit two sealed envelopes simultaneously, one containing the Technical Proposal and the other the Price Proposal, enclosed together in an outer single envelope. Initially, only the Technical Proposals are opened at the date and time advised in the Bidding Document. The Price Proposals remain sealed and are held in custody by the Purchaser. The Technical Proposals are evaluated by the Purchaser. No amendments or changes to the Technical Proposals are permitted. The objective of the exercise is to allow the Purchaser to evaluate the Technical Proposals without reference to price.

Bids of Bidders which do not conform to the mandatory requirements may be termed as non-responsive and will not be evaluated further. Following the approval of the technical evaluation, and at an address, date and time advised by the Purchaser, the Price Proposals are opened in public. The Price Proposals are evaluated and, following approval of the price evaluation, the Contract is awarded to the Bidder whose Bid has been determined to be have scored maximum in the composite formula as defined below:

Total Score = 50% x Technical Proposal Score + 50% x Price Proposal Score

E.2 Evaluation and Comparison of bids

Initially the Supplier's responses are reviewed for compliance with the Commercial terms and conditions. The Suppliers who fail to comply with any of the commercial terms and conditions mentioned may be termed as non-responsive and will not be evaluated further. For those Suppliers who have qualified the commercial terms and conditions Technical evaluation will be conducted followed by the Price-Bid evaluation. The Suppliers who qualify the minimum technical requirement will be considered for the price-bid evaluation. The price bids will remain sealed until the technical evaluation is complete.



Technical Evaluation

The technical bid has a weightage of 50%. Technical evaluation will happen in **two stages**.

Stage-1: Preliminary Evaluation

In stage-1, the following shall be confirmed: Deviations, Submission of Bank Guarantee, Acceptance of terms and conditions, Acceptance to scope of work and compliance to mandatory technical requirements (as mentioned in Appendix A). In case the bid doesn't meet all the mandatory requirements, the bid shall be termed as non-responsive and will not be evaluated further

Stage-2

The distribution of weights shall be as follows:

No	Description	Weight	
Α	Technical Proposal		50
1	Technical solution as per SRS (G2)	19	
2	Approach & Methodology	4	
3	Project Experience	14	
4	Team Details (CV)	5	
5	Firm Details		
В	Price Proposal		50
	Total Marks		100

Table 19: Distribution of weights for bid evaluation

Details for each of the above parameters is as mentioned subsequently.

A. Technical Proposal: Following is the methodology which shall be used to evaluate the various parameters under the technical proposal.

A.1 Technical solution Evaluation

Table 20: Score for Technical Evaluation

No	Description	Maximum Score
	Technical Solution Score	19
i)	G2 Section of SRS (refer Appendix B.1)	19
	Each module has a relative importance based on the functionality/ requirements.	

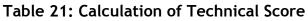


	Module Weightage = Relative Importance of Module / Summation of Relative Importance of Modules * 19 (max module score)	
	Each module has requirement which has been classified and given score based on the following:	
	• Vital: 3	
	• Essential: 2	
	• Desirable: 1	
	Supplier shall submit their response (self evaluation as per the format mentioned in Appendix D.2.2) against the requirement and score shall be given as per the following:	R
	• Functionality Not Avail: 0 marks	Ċ
	 Available with modifications / workaround: 1 marks 	
	• Functionality available: 2 marks	/
ii)	G3 Section of SRS (refer Appendix B.2)	No Marks
	The entire G3 section is the minimum requirement (and hence mandatory) for the Utility and needs to be supplied as per the specifications. In case the bidder decides to take any deviation, the same has to be clearly mentioned under the deviations (D.2.12). Utility shall decide if the same is acceptable or not. In case the same is not acceptable, the bid shall be rejected and financial bid of the bidder shall not be opened.	

Bidder's self-response to the solution (refer A.1 above) shall be as per the manner as indicated in Appendix-B.

The final score for Technical Specifications (G2 Section of SRS) will be calculated as follows:

Calculation of Score for Technical Solution									
Step	Description	Calculation							
1	Each requirement will have maximum score	Criticality X Options Available for Supplier							





2	Supplier will get the score for each requirement	Criticality X Options Chosen by Supplier
3	Weightage Score Calculation per module	Module Score / Maximum Module Score * Module weightage
4	Weightage Score Calculation per TS	TS Score / Maximum TS Score * TS weightage
5	Final Score	Summation of weightage score of each module (refer step 3 & 4) of G2

For qualifying, Supplier must score minimum of 10 marks in G2 Section and should comply with all requirements of G3 section. In case the bidder has taken any deviation in G3 sections, Utility shall decide whether the same shall be acceptable or not.

A.2 Approach & Methodology

This section shall be assigned 4 marks. The following table elaborates various requirements within A&M and the distribution of marks:

- Understanding of Utility and its requirement (Also provide Prior interaction with Utility, if any) (1.5 marks)
- Details of proposed methodology (0.5 marks)
- Resource planning and estimation (0.5 marks)
- Detailed work-plan with timelines (1.5 marks)

A.3 Project Experience: Shall be assigned 14 marks. The distribution of marks shall be as follows:

- Power Sector Experience (5.5 marks)
- Usage of project (2 marks)
- Size of GSP, NSP and MDASP (1.5 marks)
- IT Experience: Application Modules implemented (5 marks)

A 4 CV: Shall be assigned 5 marks. Following is the list of categorization of requirement of personnel:

- GIS (Customer Indexing/ Asset Mapping/ Integrated Network Analysis
- Meter Data Acquisition / Energy Audit
- Billing/Collection/New Connection/Disconnection
- Web Self Service/ Security/ MIS
- Customer Care

A.5 Firm details: Shall be assigned 8 marks. The distribution of marks shall be as follows:

- i. Cumulative Turn-Over in the last 3 financial years (2.0 marks)
- ii. Level of CMM/CMMI certification (2.0 marks)
- iii. ISO certification (2.0 marks)
- iv. No. of locations in India (2 marks)



Bidders need to score a minimum score of "40" out of 50 in the technical evaluation; else the bid shall be termed as non-responsive and will not be evaluated further.

B. Price-Bid Evaluation

The Price-Bid evaluation is done only for those bids which are responsive and which have a Final Technical score which is more than or equal to the minimum score for technical proposal mentioned in sub-section A above.

The net cost quoted will be calculated as simple addition of all the cost mentioned in the price proposal (Clause D.3, Appendix D). The price proposal score shall be calculated with following formula:

Price proposal score = (LP/FP)*50, where LP: Lowest Price offer; FP: Firm's Price

C. Total Score

Total score shall be calculated as below:

Total Score = Technical Proposal Score + Price Proposal Score

The bid with the highest overall score will be awarded the project.



F Appendix F - Geographical & Administrative Information

Following is the list of towns which are included under the scope of work

Table 22: Geographical & Administrative Information of all the Project Areas

General Description	Detail
Name of town with HQ	Chennai
Name of town with Data Centre	Chennai
Name of town with Customer Care Center	Chennai

Sr. No.	Name of Project Area (town)	Number of Sub divisions office	Number of Other Offices	Nearest Railway Station to HQ	Nearest Functional Airport to HQ	Total Area of Coverage (Sq.km)	Total Population (as per 2001 census)
1	Chennai	75	312	Chennai	Chennai	926	6560242
2	Chengalpet	1	5	Chennai	Chennai	6.09	62582
3	Maraimalainagar	1	4	Chennai	Chennai	49.23	48463
4	Dharapuram	1	5	Tirupur	Coimbatore	7.02	64984
5	Palladam	2	7	Coimbatore	Coimbatore	19.42	30016
6	Comibatore	5	35	Coimbatore	Coimbatore	150	1461139
7	Coonoor	1	4	Coonoor	Coimbatore	15.05	50079
8	Gudalur	1	4	Ooty	Coimbatore	4	43096
9	Mettupalayam	1	5	Mettupalayam	Coimbatore	7.20	66887



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TAMIL NADU ELECTRICITY BOARDRFP DOCUMENT FOR APPOINTMENT OF IT IMPLEMENTATION AGENCYoblachiCoimbatore18.90128458irupurCoimbatore27.40550826OotyCoimbatore30.6793973umalpetCoimbatore7.4059668oblachiCoimbatore21795107AtturCoimbatore4058000ErodeCoimbatore2.75104646Combatore28.2248815Coimbatore28.2248815

10	Pollachi	1	3	Pollachi	Coimbatore	18.90	128458
11	Tirupur	2	12	Tirupur	Coimbatore	27.40	550826
12	Udhagamandalam	1	7	Ooty	Coimbatore	30.67	93973
13	Udumalpet	1	5	Udumalpet	Coimbatore	7.40	59668
14	Valparai	1	6	Pollachi	Coimbatore	217	95107
15	Attur	1	4	Attur	Coimbatore	40	58000
16	Bhavani	1	3	Erode	Coimbatore	2.75	104646
17	Edappady	2	2	Sanakri	Coimbatore	28.22	48815
18	Erode	4	16	Erode	Coimbatore	91.49	314994
19	Gobichettypalayam	1	4	Erode	Coimbatore	7.51	55158
20	Mallasamudram	1	3	Salem	Coimbatore	10.81	38900
21	Mettur	2	5	Mettur	Coimbatore	14.75	53633
22	Namakkal	1	4	Salem	Trichy	13.80	53055
23	Periyasemur	0	1	Erode	Coimbatore	10.10	32024
24	Rasipuram	2	3	Salem	Trichy	8.28	50100
25	Salem	7	34	Salem	Coimbatore	91.54	696760
26	Sathyamangalam	2	3	Erode 🔨	Coimbatore	2.92	33722
27	Tiruchengode	2	5	Erode	Coimbatore	17.64	80187
28	Vellakoil	2	5	Erode	 Coimbatore 	64.75	34438
29	Bodinayakanur	0	3	Theni	Madurai	6.88	73410
30	Chinnmanur	1	2	Theni	Madurai	25.95	38360
31	Devakottai	1	2	Devakottai	Trichy	12.50	40386
32	Dindigul	2	8	Dindigul	Madurai	14.01	196955
33	Gudaloore	0	1	Theni	Madurai	32	36000
34	Kambam	1	3	Theni	Madurai	4.50	58891
35	Karaikudi	1	3	Karaikudi	Trichy	13.75	127717



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TAMIL NADU ELECTRICITY BOARD
RFP DOCUMENT FOR APPOINTMENT OF IT IMPLEMENTATION AGENCYMathapuramMadurai2.5030412MathapuramMadurai21.5032969aduraiMadurai90.801203095aduraiMadurai15.0233881PalaniMadurai6.6367231amakudiMadurai2.8942012Madurai66205037048

36	Keelakarai	1	1	Ramanathapuram	Madurai	2.50	30412
37	Kodaikanal	1	3	Kodaikanal Road	Madurai	21.50	32969
38	Madurai	8	47	Madurai	Madurai	90.80	1203095
39	Melur	1	2	Madurai	Madurai	15.02	33881
40	Palani	1	3	Palani	Madurai	6.63	67231
41	Paramakudi	1	3	Paramakudi	Madurai	3	84321
42	Periyakulam	1	2	Theni	Madurai	2.89	42012
43	Ramanathapuram	1	4	Rameswaram	Madurai	6	62050
44	Rameswaram	1	1	Rameswaram	Madurai	4	37968
45	Sivagangai	1	3	Sivagangai	Madurai	9.27	40220
46	Theni	2	5	Theni	Madurai	22.23	85498
47	Thirumangalam	1	4	Madurai	Madurai	16.74	43631
48	Usulampattai	1	2	Madurai	Madurai 🔪	13.17	30601
49	Amabasamudram	1	2	Amabasamudram	Tuticorin	17.34	58485
50	Aruppukottai	1	4	Aruppukottai	Tuticorin	14.56	84029
51	Kadayanallur	1	4	Kadayanallur	Madurai	100	75612
52	Kollencode	1	2	Parasala 🔨	Trivendrum	7.92	34425
53	Kovilpatti	1	5	Tuticorin	Tuticorin	43.30	87450
54	Muthiahpuram	1	2	Tuticorin	Tuticorin	32.00	31813
55	Nagercoil	2	9	Nagercoil	Trivendrum	19.37	208179
56	Puliyangudi	1	2	Kadayanallur	Madurai	55.17	60080
57	Rajapalayam	2	8	Rajapalayam	Madurai	11.86	122307
58	Sankarankovil	1	3	Sankarankovil	Tuticorin	80	53606
59	Sattur	1	1	Sattur	Madurai	4.50	31443
60	Sivagasi	1	5	Sivagasi	Madurai	6.89	121358
61	Srivilliputhoor	1	4	Srivilliputhoor	Madurai	5	73183



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TAMIL NADU ELECTRICITY BOARDRFP DOCUMENT FOR APPOINTMENT OF IT IMPLEMENTATION AGENCYenkasiTuticorin26.1563432atticorinTuticorin110243415atticorinTuticorin18.6037101unelveliTuticorin900433352amuthiramTuticorin38.5754795dhunagarMadurai6.6072081anthangiTrichy7.5634134anthangiTrichy28.4931268

62	Tenkasi	1	4	Tenkasi	Tuticorin	26.15	63432
63	Thoothukkudi	2	9	Tuticorin	Tuticorin	110	243415
64	Tiruchendur	1	2	Tuticorin	Tuticorin	18.60	37101
65	Tirunelveli	3	17	Tirunelveli	Tuticorin	900	433352
66	Vikramsingapuram	1	2	Ambasamuthiram	Tuticorin	38.57	54795
67	Virudhunagar	1	5	Virudhunagar	Madurai	6.60	72081
68	Aranthangi	2	3	Aranthangi	Trichy	7.56	34134
69	Jayankondam	1	3	Viruthachalam	Trichy	28.49	31268
70	Karur	5	11	Karur	Trichy	36.50	153365
71	Kumbakonam	2	6	Kumbakonam	Trichy	12.58	160767
72	Manapparai	1	4	Manapparai	Trichy	15.70	35770
73	Mannarkudi	2	6	Needamangalam	Trichy	11.50	61588
74	Mayiladuthurai	1	3	Mayiladuthurai	Trichy	11.27	84505
75	Nagapatinam	1	5	Nagapatinam	Trichy	16.00	93148
76	Pattukottai	1	3	Pattukottai	Trichy	9	65533
77	Perambalur	1	5	Ariyalur	Trichy	20.59	37631
78	Pudukottai	2	7	Pudukottai 🔨	Trichy	12.95	109217
79	Sirkali	0	2	Sirkali	Trichy	13.21	32228
80	Thanjavur	1	8	Thanjavur	Trichy	36.31	215314
81	Thuraiyur	1	2	Kulithalai	Trichy	14.10	31005
82	Tiruchirappalli	4	26	Trichy	Trichy	47.10	866354
83	Tiruvarur	1	4	Tiruvarur	Trichy	10.48	56341
84	Vedharniyam	1	1	Nagapattinam	Trichy	16	31627
85	Ambur	2	5	Ambur	Chennai	17.67	99624
86	Arakkonam	1	3	Arakkonam	Chennai	9.07	77500
87	Arcot	1	3	Arcot	Chennai	7.49	50267



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88	Dhamapuri	2	6	Dhamapuri	Chennai	9.54	64496
89	Gudiyatham	1	4	Gudiyatham	Chennai	4.71	100115
90	Hosur	3	8	Hosur	Bangalore	11.71	84394
91	Kanchipuram	2	8	Kanchipuram	Chennai	11.61	198170
92	Krishnagiri	2	4	Jolarpet	Bangalore	11.50	64587
93	Melvisharam	1	1	Walajah	Chennai	8.67	35060
94	Pernampattu	1	1	Ambur	Chennai	3.61	41499
95	Thirupathur	1	4	Tirupattur	Chennai	4.68	60876
96	Thiruvallur	3	4	Thiruvallur	Chennai	7.15	52592
97	Tiruttani	3	6	Tiruttani	Chennai	6.75	44066
98	Vaniyambadi	2	6	Vaniyambadi	Chennai	9.54	103950
99	Vellore	3	12	Vellore	Chennai	27.25	451000
100	Arni	1	4	Kalambur	Chennai 🔪	11.62	60815
101	Chidambaram	1	3	Chidambaram	Trichy	4.80	57733
102	Cuddalore	2	8	Cuddalore	Chennai	27.69	158634
103	Kallakkurichi	1	3	Tindivanam	Trichy	11.63	36791
104	Nellikuppam	1	2	Nellikuppam 📈	Chennai	4.50	44222
105	Panruti	1	3	Panruti	Chennai	18	55346
106	Tindivanam	3	4	Tindivanam	Chennai	22.33	67737
107	Tiruvannamalai	1	6	Tiruvannamalai	Chennai	13.64	130567
108	Tiruvettipuram	1	2	Kanchipuram	Chennai	10.76	35201
109	Villupuram	2	9	Villupuram	Chennai	8.60	95455
110	Virudhachalam	1	4	Vridhachalam	Trichy	17.60	60164



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G Appendix G - List of Offices for WAN Connectivity

List of offices of Utility:

* Levels refer to the position in the hierarchy of the office in the administrative setup assuming Head Quarter as level 1.

Table 23: List of Offices for WAN Connectivity

S.No	Name of Town	Name of Office at Level 2* Regional office	Name of Office at Level 3* Circle Office	Name of Office at Level 4* Division Office	Name of Office at Level 5* Sub Division Office	Name of Office at Level 6* Section Office
				\sim		Nagalnagar
	1 Dindigul		Dindigul	N/Dindigul	T/Dindigul	Begampur
1						Pandiyannagr
	Dinaigut					Nehrujinagar
						T/Dindigul
					W/Dindigul	Rockfort
2	Palani	Madurai		Palani	T/Palani	Adivaram
2	Falain			Falain	17 Falain	T/Palani
3	Kodaikanal			Patlaguadu	Kodaikanal	T/E/kodaikanal
3	KUUdIKalial			Batlagundu	KOUdikalial	T/W/kodaikanal
			Theni		Town/Theni	Town/Theni
4	Theni			Theni	rown/rneni	North/Theni
					Rural/Theni	East/Theni



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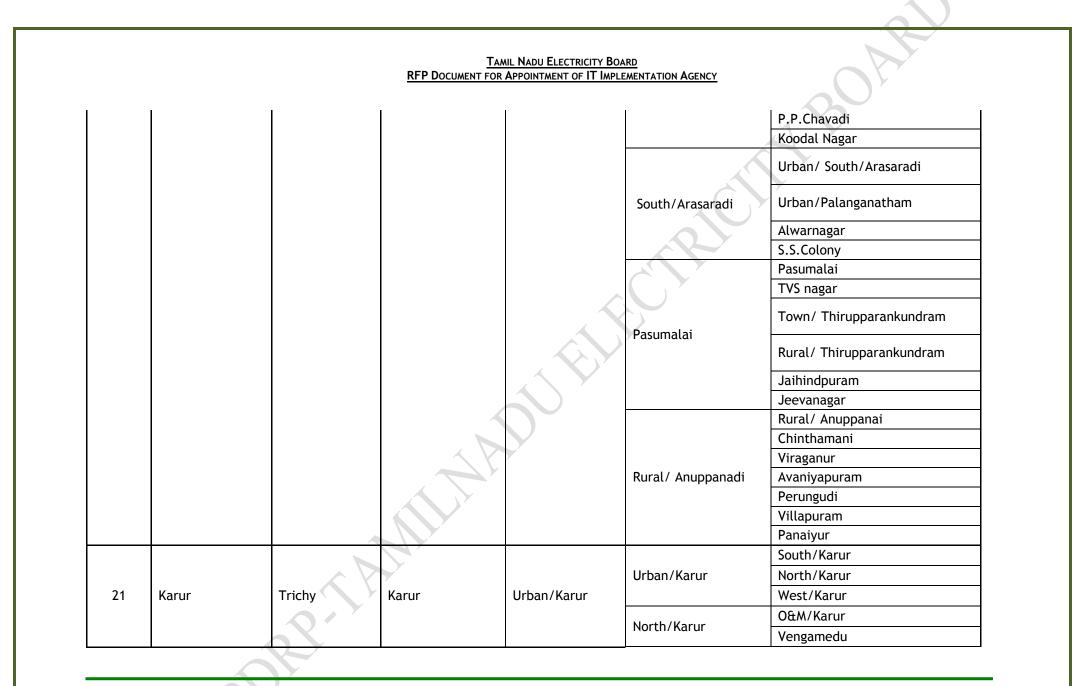
	1				Town/Bodi
5	Bodinayakkanur			Bodinayakkanur	East/Bodi
					West/Bodi
6	Periyakulam		Periyakulam	West/Periyakulam	Town/Periyakulam
7	Chinnamanur		Chinnamanur	Chinnamanur	Town/Chinnamanur
8	Kambam			Kambam	Town/Kambam
o	Kambam		Kambam	Kampam	North/Kambam
9	Gudaloore			Kambam	Gudaloore
10	Ramanathapuram			Turr	Town/South/Ramanathapuram
10	Ramanathapuram			Town /Ramanathapuram	Town/North/Ramanathapuram
11	Keelakarai		Ramanathapuram	Ramanachapuram	Keelakarai
12	Rameswaram	Ramanathapuram		Rural / Ramanathapuram	Rameswaram
13	Paramakudi		Paramakudi	Town /Paramakudi	Town/North/Paramakudi
15	Falamakuui		Falamakuui		Town/South/Paramakudi
14	Sivagangai		Sivagangai	Town/Sivagangai	Town/Sivagangai
15	Karaikudi	Sivagangai	Karaikudi	Karaikudi	Town/North/Karaikudi
15	Kalaikuul	Sivagangan	Raraikuui	Karaikuui	Town/South/Karaikudi
16	Devakottai		Devakottai	Devakottai	Town/Devakottai
17	Melur		Madurai/East	North/Melur	Town/Melur
18	Usilampatty	Madurai	Usilampatty	Town/Usilampatty	Town/Usilampatty



19	Thirumangalam			Thirumangalam	Thirumangalam	Town/Thirumangalam sengulam
						Tamukkam
						Racecource
					Tamukam	Sellur
				North/Madurai		Tagorenagar
						Chokkikulam
						Teppam
					Thompson	Munichalai
					Theppam	Arasamaram
						Keelavasal
						Subramaniyapuram
			Madurai Metro Sout			Arapalayam
					Subramaniapuram	Eillsnagar
20	Madurai					Tamilsangam
						Town hall Road
						Koil
						Mahal
					Koil	Mahalipatty
						Jansi
						Yanaikkal
						Urban/North/ Arasaradi
			×*			Rural/Arasaradi
				West/Madurai	North/Arasaradi	Vilangudi
		2''				Urban/West/ Arasaradi

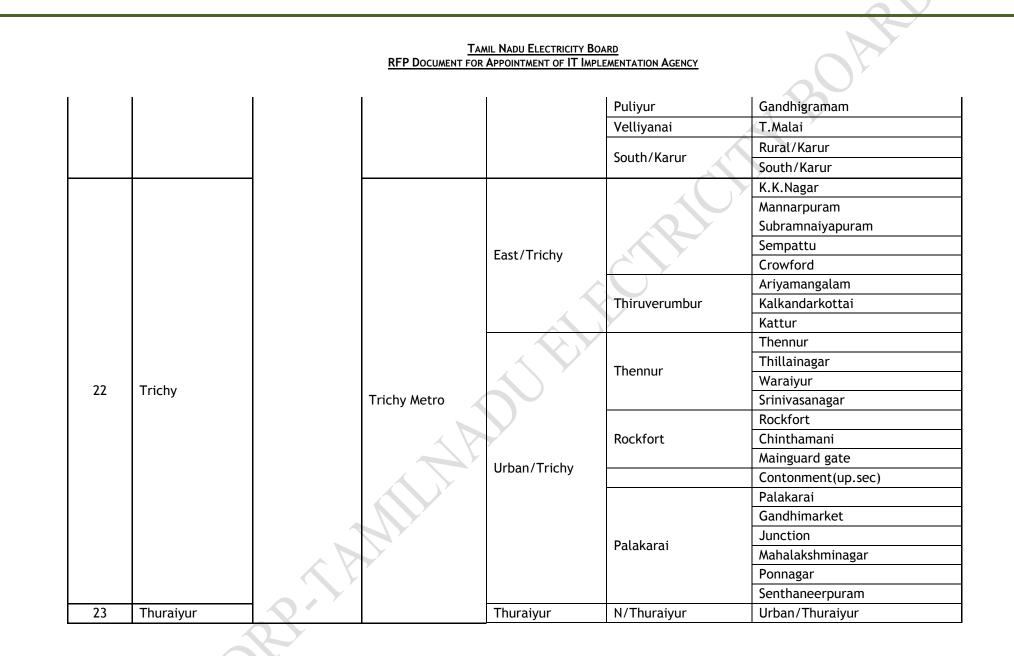


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						Town/Manapparai
24	Manapparai			Manapparai	Manapparai	East/Manapparai
						Rural/Manapparai
						Town/North/Pudukkottai
						Town/East/Pudukkottai
25	Pudukkottai			Pudukkottai	Town/Pudukkottai	Town/West/Pudukkottai
			Pudukkottai			Town/Central/Pudukkottai
					Rural/Pudukkottai	O&M/Thiruvappur
26	Aranthangi			Aranthangi	Town/Aranthangi	Town/Aranthangi
					Rural/Aranthangi	U/W/aranthangi
			Perambalur	Perambalur	Town / Perambalur	Town / Perambalur
27	Perambalur	ambalur				South / Perambalur
						North / Perambalur
28	Jayankondam			Ariyalur	Jaynkondam	South Jayankondam
20	Jayankondam			Allyatui	Jayinkondani	North Jayankondam
						Arulananda Nagar(Upgraded section)
						Court Road
29	Thanjavur		Thanjavur	U/Thanjavur	U/Thanjavur	Manambuchavadi
			7			Palace
						Karanthai
						Eswari Nagar



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1						T/E/Kumbakonam
					T/Kumbakonam	T/S/Kumbakonam
20	Kumbekeen			Kumbakanam		T/N/Kumbakonam
30	Kumbakonam			Kumbakonam	R/Kumbakonam	T/W/Kumbakonam
					N Kumbakunam	U 33/11KV SS/ Kumbakonam
31	Pattukkottai			Pattukkottai	T/Pattukkottai	T - I /Pattukkottai
31	Pattukkottai			Pattukkottai	I / Pattukkottai	T - II /Pattukkottai
						T I/Mannargudi
					T/Mannargudi	T I I/Mannargudi
32	32 Mannargudi			Mannargudi		W/Mannargudi
						N/Mannargudi
					R/Mannargudi	E/Mannargudi
	33 Nagapattinam			Nagapattinam		T/Nagapattinam
33		inam			N/Nagapattinam	Velipalayam
			Nagapattinam			Nagore
34	Vedaraniyam				Vedaraniyam	Vedaraniyam
35	Mayiladuthurai			Mayiladuthurai	T/Mailaduthurai	E/Mailaduthurai
22	Mayilauutiurai			Maynauuthurai	i / Mailauullui ai	W/Mayiladuthurai
36	Sirkali			Sirkali	T/Tiruvarur	T/Sirkali
						T/Thiruvarur
37	Tiruvarur			Tiruvarur	T/Tiruvarur	S/Thiruvarur
						N/Thiruvarur
		7	Y			T/Erode
			Y			S/Erode
38	Erode	Erode	Erode	Urban	Town/Erode	W/Erode
		\				E/Erode
		h				Muthampalayam



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			Tan RFP Document for	NL NADU ELECTRICITY BOA APPOINTMENT OF IT IMPLE	<u>RD</u> EMENTATION AGENCY	Ohr
						Thindal
					West/Erode	Narayanavalasu
						E.K.Valasu
						T/V.P.C
					V.P.Chatram	R/V.P.C
					V.P.Chatram	Asokapuram
						Karungalpalayam
					South/Erode	R/Erode
39	Periyasemur				V.P.Chatram	B.P.Agaraharam
				A	South/Vellakoil	Town/Vellakoil
40	Vellakoil			Kangoyam	South/ vellakoll	Rural/Vellakoil
40	vellakoli			Kangeyam	North/Vellakoil	East/Vellakoil
					NOI LII7 VELLAKOIL	West/Vellakoil
41	Gobi			Gobi	West/Gobi	Town/Gobi
41	GODI			GODI	West/Gobi	Pudupalayam
42	Bhavani		Gobi	Bhavani	North/Bhavani	Town/Bhavani
42	Dilavalli			Dilavalli	NOI LITZ DI AVAITI	Kalingarayanpalayam
43	Sathyamangalam			Sathyamangalam	East/Sathy	North/Sathy
45	Satifyamangatam			Satifyamangatam	West/Sathy	South/Sathy
44	Namakkal			Namakkal	Town/Namakkal	Town/south/Namakkal
	Hamakkat			Namakkat	Town, Hamakkat	Town/North/Namakkal
			Namakkal		South /T'reda	South/T'gode
45	Thiruchongodo		Y	Thiruchengode	South/T'gode	Kuttapally
40	Thiruchengode		<i>Y</i>		N/Thiruchongodo	N/Thiruchengodu
		0 / ⁷			N/Thiruchengode	C/Thiruchengodu
46	Rasipuram	hX		Rasipuram	T/Rasipuram	T/Rasipuram



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					R/Rasipuram	R/S/Rasipuram
						T/mallasamudram
47	Mallasamudram			Thiruchengode	Mallasamudram	Kalipatty
						R/Mallasamudram
48	Edapady				T/Edapady	T/Edapady
40	Edapady				R/Edapaddy	R/Edapaddy
			Mettur	Mettur	Distribution/ Mettur	T/Mettur
49	Mettur				Distribution/ Mettur	R/Mettur
					Sampally	Sampally
				<u> </u>		Seelanaickenpatty
					Gugai	Gugai
				Town/Salem	Ougai	Linemedu
						Nethimedu
						Bazzar
					Kitchipalayam	Kitchipalayam
						Kalarampatty
						Dadagapatty
50	Salem		Salem			Central
50	Salem		Jatein	<i></i>		Fort
						ThillaiNagar
						Ponnamapet
						Swarnapuri
					Swarnapuri	Narasothipatti
			\sum	West/Salem		Mallamoopampatti
			7	west/salem		Suramangalam
					Suramangalam	Thiruvagoundanur
						Nethimedu Rural

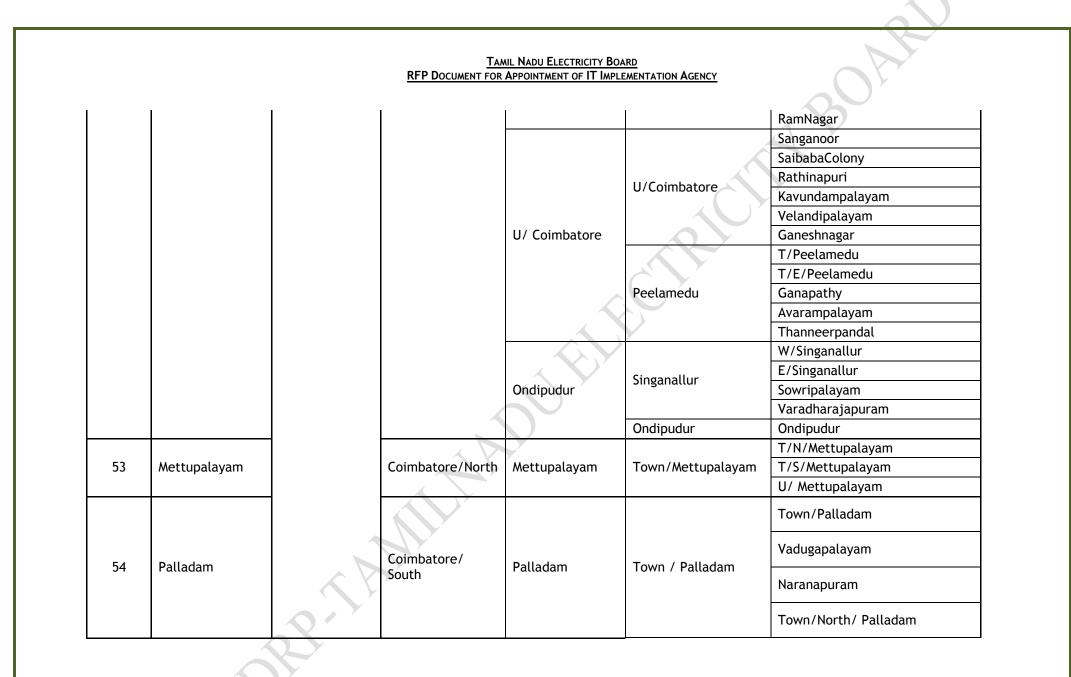


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			RFP DOCUMENT FO	MIL NADU ELECTRICITY BO R APPOINTMENT OF IT IMPL	ard Ementation Agency	Or
						Shivadapuram
						Shevapet
					Shevapet	Arisipalayam
					snevapet	Kondalampatti
						Meyyanoor
						Maravaneri
					Maravaneri	Hasthampatti
					Maravaneri	Gorimedu
				East/Salem		Kannankurichi
				Udayapatty		
					Udayapatty	Ammapet
						Veeranam
						Town/Attur
51	Attur			Attur	Attur / Town	North/Attur
						South/Attur
						Town Hall
						Bazar/East
						Lawly Road
						Ukkadam
						Selvapuram
			Coimbatore/			Race Course
52	Coimbatore	Coimbatore	Metro	C/ Coimbatore	C/Coimbatore	Bazar/West
						R.S.Puram/North
						R.S.Puram/South
			7			P.N.Palayam
						Puliakulam
						R.N.Puram



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1	1	i		I	I	
					Rural / Palladam	Madapur
						Town/ Gudalur
55	Gudalur			Ooty	Gudalur	Lower/ Gudalur
55	Gudalui			Obly	Gudatur	Town/ South/ Gudalur
						Commercial Road
		nandalam	Milainia			Ettins Road
56	Udagamandalam		Nilgiris	Udagamandalam	T / Udagamandalam	Hospital Road
						Tamilagam
						Lakeview
				Coonoor	Town / Coonoor	Sims Park
57	57 Coonoor					Mount Road
						Mount Plesant
					Town/ North/ Tirupur	Town/ North/ Tirupur
				\mathbf{O}		Town/ West/ Tirupur
						Rayapuram
						Bridge way colony
58	Tirupur		Tirupur	Tirupur		Kongunagar
						Town/ South/ Tirupur
						Townhall
					Town/ South/ Tirupur	Bazar
					rinupui	Town/ East/ Tirupur
						Bharathinagar
						T/Udumalpet
59	Udumalpet	A	Udumalpet	Udumalpet	T/Udumalpet	GandhiNagar
1				-		R/E/Udumalpet



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	1	1				Mahalingapuram
60	Pollachi			Pollachi	C/Pollachi	T/Pollachi
					Á	S/Valparai
						N/Valparai
61	Valparai			Angalakurichi	Valparai	Mudis
						Sholayar Nagar
						lyerpadi
						T/Dharapuram
62	62 Dharapuram		Dharapuram	Dharapuram	E/Dharapuram	E/Dharapuram
				<u>~</u>		R/Dharapuram
					Town/NorthCuddalor e	New Town Puduppalayam
						Urban/Manjakuppam
(2)	C ddalaa	uddalore		Cuddalore -		Jothi Nagar
63	Cuddalore				TownSouth/Cuddalor	Thiruppaliyur
						Town/Cuddalore Port
					e	Rural North /Cuddalore Port
	David	Villuppuram	Cuddalore	P ti	Turn (Durn ti	Town/Panruti
64	Panruti			Panruti	Town/Panruti	Rural/East/Panruti
65	Nellikuppam			Nellikuppam	Town / Nellikuppam	Town/Nellikuppam
	Chidamharam			Chidamharam	Town (Chidomhorner	Urban/West/Chidambaram
66	Chidambaram			Chidambaram	Town/Chidambaram	Urban/East/Chidambaram
67	Vridhachalam			Vridhachalam	Town/Vridhachalam	Town/Vridhachalam



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						Rural / North/Vridhachalam
						Urban / Kandiyan Kuppam
						Town East/Arani
68	Arani			Arani	Town/Arani	Town West/Arani
						Town North/Arani
			Tiruvannamalai			Town East/T.V.Malai
69	Tiruvannamalai			West/T.V.Malai	Town/T.V.Malai	Town West/T.V.Malai
						Kilnathur
						Thamarai Nagar
70	Tiruvettipuram			Cheyyar	Town/Cheyyar	Town/Tiruvettipuram
		/illupuram				T-I/Villupuram
				Villupuram	T/Villupuram	T-II/Villupuram
71	Villuourom					T-III/Villupuram
71	vittupuram					R/E/Villupuram
					R/Villupuram	R/S/Villupuram
					K/ villupurain	R/W/Villupuram
			Villupuram			T-I/Tindivanam
					T/Tindivanam	T-II/Tindivanam
72	Tindivanam			Tindivanam		Manur
					W/Tindivanam	
					E/Tindivanam	
73	Kallakurichi			Kallakurichi	T/Kallakurichi	T/Kallakurichi
73					i / Nallanui ICIII	R/S/Kallakurichi
74	Chengalpattu	Chennai/South	Changelnettu	Changalasttu	North/Chengalpattu	CGL - Annanagar
/4		chennal/ south	Chengalpattu	Chengalpattu	North/Chengalpattu	Town/Chengalpattu

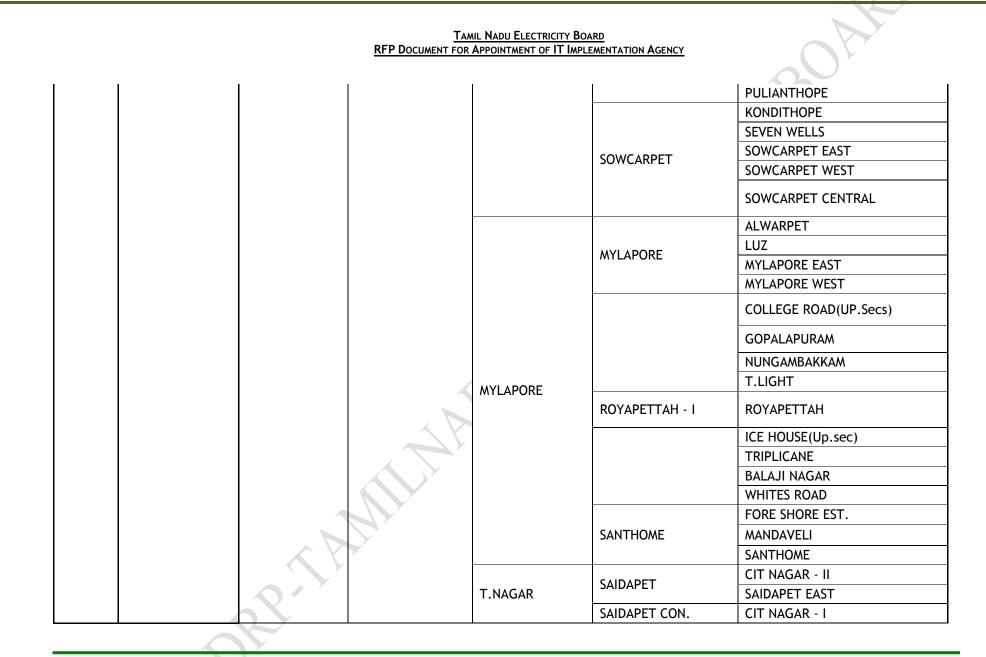


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	1	I	I		I	Maraimalainagar
75	Maraimalainagar			Maraimalainagar	Maraimalainagar	Maraimalainagar - I Maraimalainagar - II
				nai aimatamagai	maralliatalliagai	Kattankolathur
						ANNA SALAI
76	Chennai	Chennai/North	Chennai/Central	ANNA SALAI	ANNA SALAI	CHEPAUK
						G.P. ROAD
						GOVT.ESTATAE
						T.V.PET
					CHINDARIPET	CHINDARIPET
						PUDUPET
					ESPLANADE	ESPLANADE
						MANNADY
						MUTHIYALPET
						PARK TOWN
						S.K.NAGAR
						FLOWER BAZAAR
				EGMORE		EGMORE(Up.Secs)
						PANTHEON ROAD
						PERIAMEDU
						VEPERY
					KILPAUK	KELLYS
						KILPAUK
						NAMALWARPET
						PURASWALKAM
					PULIANTHOPE	CHOOLAI
						COOKSROAD
						OTTERI



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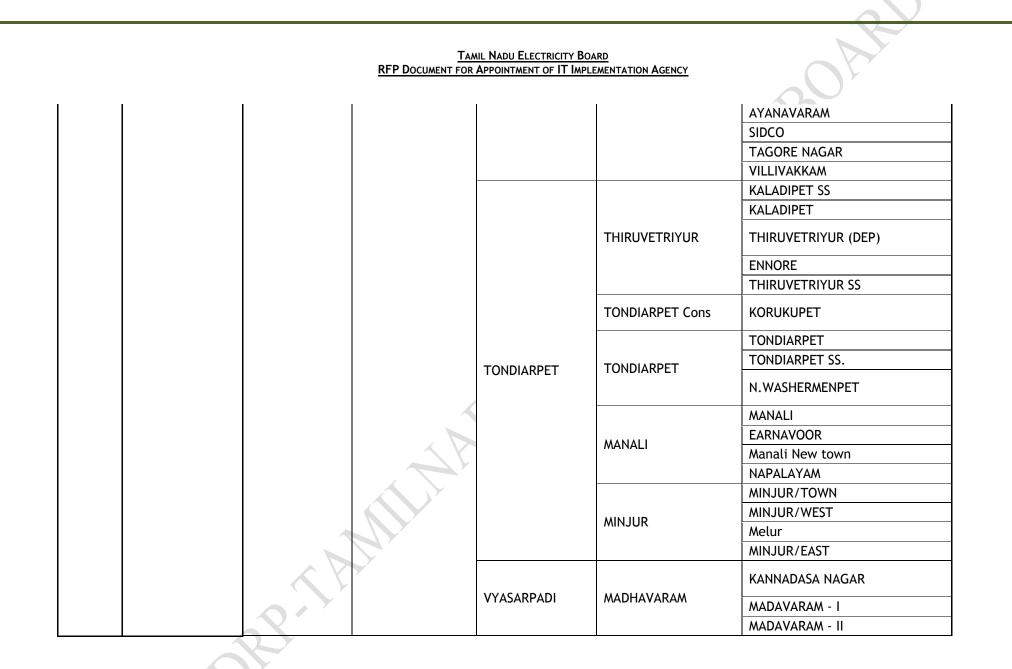


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				SAIDAPET WEST
				MAMBALAM CEN.
			T.NAGAR	MAMBALAM EAST
				MAMBALAM NORTH
				NANDANAM
			TEYNAMPET	R.A.PURAM
				TEYNAMPET
				T.NAGAR SOUTH (UP.sec)
				USMAN RD.
				WEST MAMBALAM - I
				WEST MAMBALAM - II
				RAJAJI NAGAR
				AGARAM
			PERAMBUR	PERUMBUR WEST
			FLRAMDOR	PERAMBUR EAST
				POOMBUKAR NAGAR
	Chennai/North	PERAMBUR		KOLATHUR
				KODUNGAIYUR
			SEMBIUM	GANDHI NAGAR
	₹.			LAKSHMIPURAM
				SEMBIUM
			VILLIVAKKAM	ICF

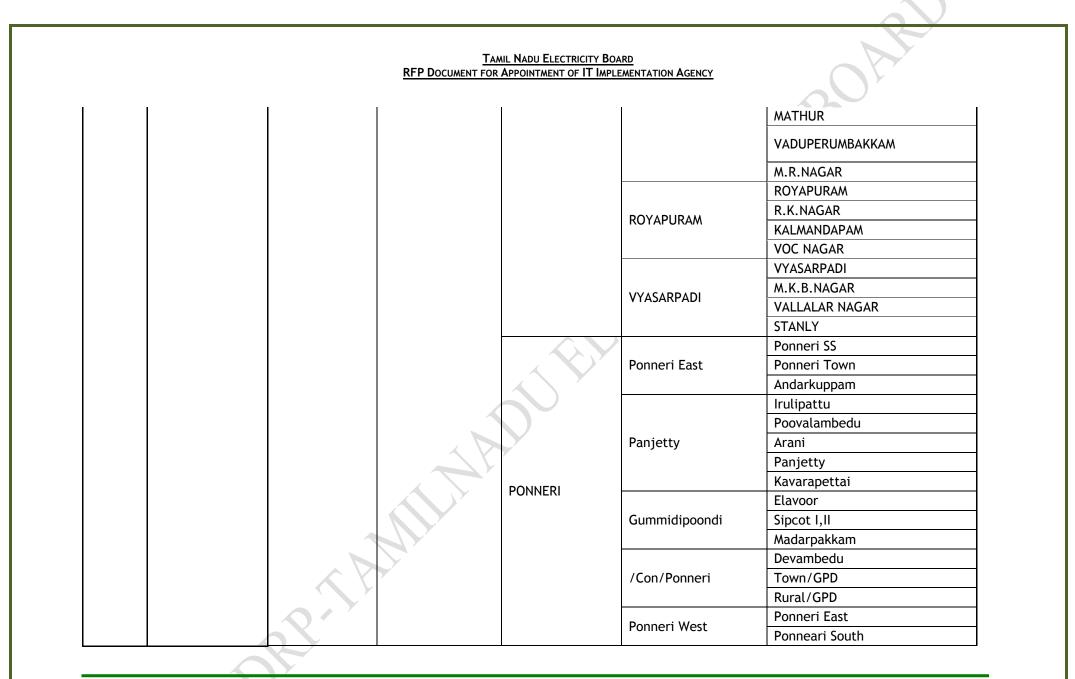


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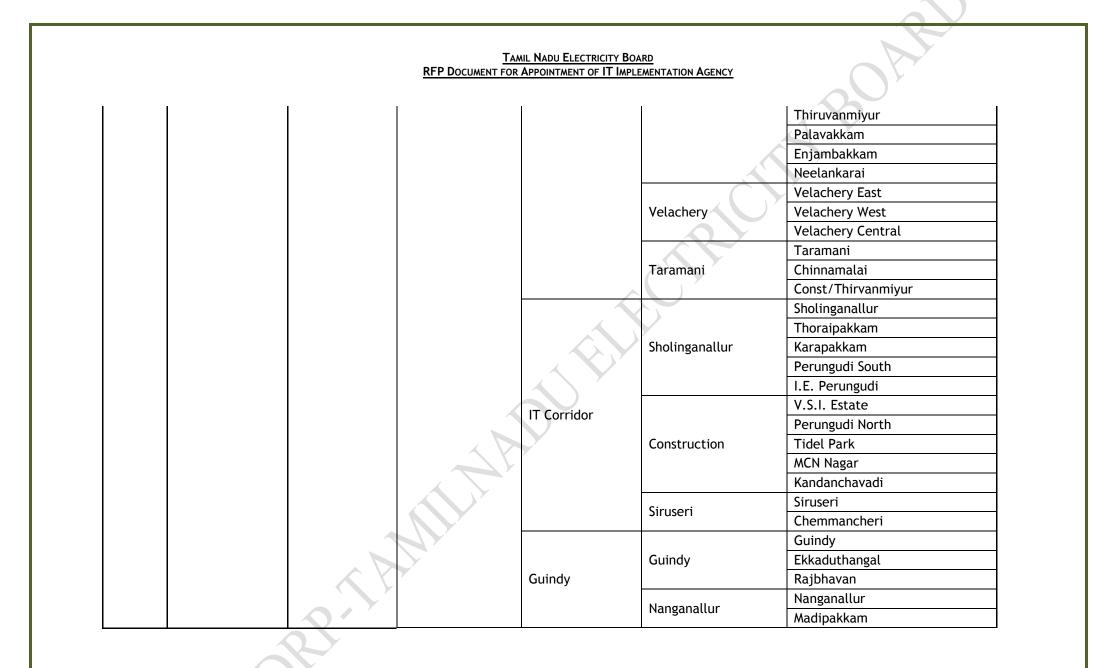


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	TA/ RFP Document for	MIL NADU ELECTRICITY BO/ APPOINTMENT OF IT IMPLI	ARD EMENTATION AGENCY	OPT
				Ponneri West
				Pulicat
				Medur
				KKNagar - West
			KKNagar	KKNagar - East
			KNINdgal	MGR Nagar
				KKNagar - South
				Ashok Nagar East
			AshokNagar	Ashok Nagar West
				Ashok Nagar Central
				Kodambakkam
		KKNagar	Kodambakkam	Vadapalani
		KNINAGAI	KUUdIIIDAKKAIII	Rangarajapuram
				Choolaimedu
Chennai/South	Chennai/South			Valasaravakkam
Chennal/ South	Chennal/ South		Valasaravakkam	Virugambakkam
			Valasaravakkam	ChinmayaNagar
				Alwarthiru Nagar
		r		Saligramam
			Saligramam	Dasarathapuram
				Alagiri Nagar
				Adyar
				Besant Nagar
	\sum	Advar	Adyar	Valmiki Nagar
	7	Adyar		Kottivakkam
				ShastriNagar
\			Indira Nagar	Indira Nagar



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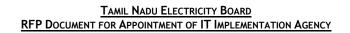


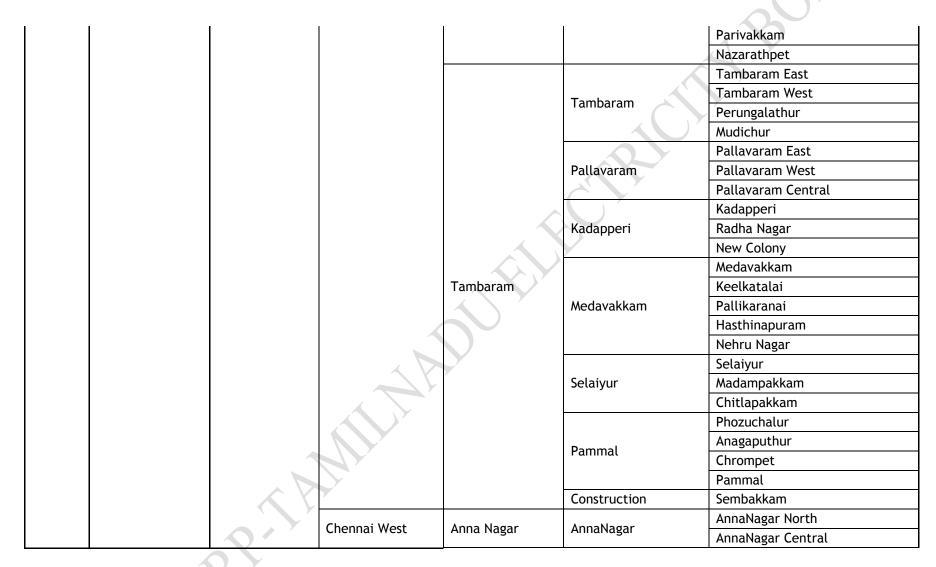
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				Moovarasampet
				Adambakkam
			Adambakkam	Puzhuthivakkam
			Адатраккат	Vanuvampet
				T.G.Nagar
				Ramapuram
			Damapuram	Mugalivakkam
			Ramapuram	Nandambakkam
				St. Thomas Mount
		<u> </u>	Meenambakkam	Meenambakkam
			Meenambakkam	Palavanthagal
				Porur - I
			Porur	Porur - II
			FUIUI	Gerugambakkam
				Karambakkam
				Kundrathur - Town
			Kundrathur	Kundrathur - Rural
		Y		Kovoor
		Porur		Thirumudivakkam - I.E.
			Thirumudivakkam	Thirumudivakkam - Rural
				Somangalam
				Mangadu
	Y		Mangadu	Kumananchavadi
				lyyappanthagal
0 ''			Poonamalle	Poonamalle South
			Poonamalle	Poonamalle North



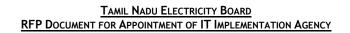
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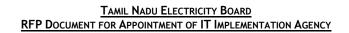
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			Shenoy Nagar
			Shanthi Colony
			Chetpet
		Chetpet	Aminjikarai
			Mahalingapuram
			Arumbakkam
			MMDA Colony
		Arumbakkam	Koyambedu
			Koyambedu Market
			Nerkundram
			Maduravoyal South
			Maduravoyal North
		Maduravoyal	Vanagaram
			Alappakam
			Porur Garden
		Constanting	AnnaNagar West
		Construction	Thirumangalam
			Ambattur South
	2	Asshart	Thiruvenkatanagar
		Ambattur	Ponniamman Nagar
			Ayanambakkam
			I.E. South
	Ambattur		I.E. North
		I.E. Ambattur	I.E. Central
			Patravakkam
			Mangalapuram
01		Korattur	Korattur



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			Padi
			Mannurpet
			JJ Nagar South
			JJ Nagar North
		JJ Nagar	JJ Nagar Central
			Krishna Nagar
		Construction	Nolambur
		Construction	JJ Nagar West
			Oragadam
		Over an deve	Banu Nagar
		Oragadam	Ambattur Central
			Ambattur North
			Thiruverkadu
		Thiruverkadu	Velappanchavadi
			Puliambedu
			Avadi south
		Avadi	Avadi North
			Thirumullaivoyal
			Pattabiram
		Dettekinen	Kamaraj Nagar
	Avadi	Pattabiram	TNHB/Avadi
	Avadi		Sekkadu
			Puzhal
		Durchal	Redhills - II
		Puzhal	Arumanthai
			Grandline
		Redhills	Redhills - I



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				MIL NADU ELECTRICITY BOA APPOINTMENT OF IT IMPLE		oph
						Sholavaram
						Sothuperumedu
						Padianallur
						Pondeswaram
					Thirumullaivoyal	Alamathy
					Thirdinattaivoyat	SIDCO Thirumullaivoyal
						VM Chattiram
					Palayamkottai	Shanthinagar
				A	Palayallikullai	Samadanapuram
						Vannarpattai
						Junction
						Melapalayam I
				T : 1 1 1 1	Junction	Melapalayam II
77	Tirunelveli			Tirunelveli- Urban	JUNCTION	Reddiarpatti
				Unbain		Maharajanagar
						Perumalpuram (AEE)
		Tirunelveli	Tirunelveli			Pettai
				7		Palayamkottai
					Town	Tatchanallur
						Town Section (AEE)
			Ar			Sankarankovil Town I
78	Sankarankovil		×	Sankarankovil	Sankarankovil	Sankarankovil Town II
70	Ke deve se llure			Ke deve se lluir	Kadayaaallur	Kadayanallur Town
79	Kadayanallur	X		Kadayanallur	Kadayanallur	Kadayanallur SS



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					Kadayanallur- Rural
80	Dulivankudi			Dulivanlaudi	Puliyankudi Town
00	Puliyankudi			Puliyankudi	Puliyankudi SS
					Tenkasi Town I
81	Tenkasi		Tenkasi	Tenkasi	Tenkasi Town II
					Tenkasi SS
82	Ambasamuthiram			Ambasamuthiram	Ambasamuthiram Town
0.2	Vikramasingapur		Kallidaikurichi		Vikramasingapuram Town
83	am			Vikramasingapuram	Vikramasingapuram SS
				7	U/S/TUTICORIN
				U/S/TUTICORIN	U/W/TUTICORIN
					R/W/TUTICORIN
84	Tuticorin				U/N/TUTICORIN
-0	Tuticorini		U/TUTICORIN		U/ E/ TUTICORIN
			0/TOTICORIN	U/N/TUTICORIN	U/C/ TUTICORIN
		Tuticorin	Y		U/KEELUR/TUTICORIN
05	M				Muthaiyapuram/N
85	Muthaiyapuram			U/S/Tuticorin	Muthaiyapuram/S
86	Tiruchendur		Tiruchendur	Tiruchendur	Tiruchendur
87	Koviloatti		Koviloatti		T/E/ KOVILPATTI
07	Kovilpatti		Kovilpatti	T/Kovilpatti	T/W/ KOVILPATTI



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						T/ N/ KOVILPATTI
						T/S/ KOVILPATTI
						E/Virudhunagar
88	Virudhunagar			Virudhunagar	T/Virudhunagar	W/Virudhunagar
						S/Virudhunagar
89	Sattur			Sivakasi	T/Sattur	T/Sattur
					A Y	T/W/RJPM
					T/Datapalayam	T/N/RJPM
					T/Rajapalayam	T/E/RJPM
90	Rajapalayam			Rajapalayam		T/S/RJPM
					7	Averampatti
					SS/Rajapalayam	Thotiyapatti
			Virudhunagar			Chatrapatti
						Market Bazzar/SVPR
91	Srivilliputhur			Srivilliputhur	T/Srivilliputhur	W/SVPR
						E/SVPR
				7		T/E/Aruppukottai
92	Aruppukottai			Aruppukottai	T/Aruppukottai	T/W/Aruppukottai
						T/N/Aruppukottai
						T/E/Sivakasi
93	Sivakasi			Sivakasi	T/Sivakasi	T/W/Sivakasi
93	SIVAKASI			SIVAKASI	17 SIVAKASI	T/N/Sivakasi
						SS/Sivakasi
94	Kollencode			Pudhukadai	Pudhukadai	Kollencode
95	NagerKoil		Kanniyakumari	Nagorkoji	N/Nagorkoji	TOWN II/NGL
70	inagernoit	X		Nagerkoil	N/Nagerkoil	TOWN IV/NGL



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						TOWN VI/NGL
						PARVATHYPURAM
						TOWN I/NGL
					S/Nagerkoil	TOWN III/NGL
						TOWN V/NGL
96	Tirupottur			Tirupathur	N/Tirupattur	Town -I/Tirupattur
90	Tirupattur			Tirupathur	N/Tirupattur	Town -II /Tirupattur
						Town/Vaniyambadi
					Vaniyambadi	North/Vaniyambadi
97	Vaniyambadi			Vaniyambadi	Vaniyambadi	South/Vaniyambadi
						Valayampet
					SS / Vaniyambadi	Perumalpet
						Town/Ambur
98	Ambur		Tirupathur	Pallikonda	U/Ambur	West/Ambur
70	AIIIDUI			Fallikullua		SS/Ambur
					Vinnamanagalam	Rural/South/Ambur
		Vellore		S		Urban - I /Gudiyatham
99	Gudiyatham		Ar	Gudiyatham	U/Gudiyattam	Urban - II /Gudiyatham
						East/Gudiyatham
100	Pernambut				Pernambut	Town/Peranambut
						Fort /Dharmapuri
101	Dharmanuri			Dharmanuri	Town /Dharmapuri	East /Dharmapuri
101	Dharmapuri		Dharmanuri	Dharmapuri		West /Dharmapuri
			Dharmapuri		Adhiyamankottai	Lakkiampatty
102	Krishpagiri			Krichpogiri	Town ///richnagiri	Krishnagiri /Oldpet
102	Krishnagiri	hX		Krishnagiri	Town /Krishnagiri	Krishnagiri /Town



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1			l		C&I/Krishnagiri	Industrial Estate
						Hosur /Central
					T	Hosur /West
					Town /Hosur	Hosur /South
103	Hosur			Hosur		Andivadi
						Hosur /Rural
					C&I/Hosur	North /Hosur
					Sipcot /Hosur	Arasanatty
						Sankaramadam
				<u> </u>		Orikkai
					Town/Kanchipuram	Pillaiyarpalayam
104	Kanchipuram			N/Kanchipuram		Sivakanchi
						Vishnukanchi
					Rural/Kanchipuram	R/N/Kanchipuram
					Rurat/Ranchipurati	R/S/Kanchipuram
					South/Tiruvallur	Town/Tiruvallur
105	Tiruvallur		Kanchipuram	Tiruvallur	North/Tiruvallur	North/Tiruvallur
					East/Tiruvallur	Poondi
						Town/I/Thiruttani
					Town/Thiruttani	Town/II/Thiruttani
106	Thiruttani			Thiruttani		Rural/North/Thiruttani
					Rural/Thiruttani	Rural/East./Thiruttani
					Cons/Thiruttani	Rural/West/Thiruttani
					Urban-1/vellore	Centrel/vellore
107	Vellore	017	Vellore	Vellore	orban-1/vellore	Salavanpet
		hX			Urban-2/vellore	Sathuvachari/east



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					Sathuvachari/west
					Sankaranpalayam
					Kagidhapattarai
					West/vellore
				West/vellore	Shenpakkam
		_			Thottapalayam
08	Arcot		Arcot	Town/ Arcot	East/Arcot West/ Arcot
09	MelVisharam		AICOL	Rural/ Arcot	Town/ MelVisharam
107		-			East/ Arakkonam
10	Arakkonam		Arakkonam	Town/ Arakkonam	Town/ Arakkonam
			E		
			DUFI		
			DUFI		



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