

जोधपुर विद्युत वितरण निगम लिमिटेड

Request for Proposal for "Implementation of Revenue Management System in Jodhpur Discom on TOTEX (CAPEX+OPEX) Mode" against Tender no. TN-IT-26



Purchaser

Jodhpur Vidyut Vitran Nigam Limited (Jodhpur DISCOM)

O/o the Superintending Engineer (IT),
New Power House,
Jodhpur Discom , Jodhpur-342003

Email: seit.jdvvnI@rajasthan.gov.in

Website: <http://energy.rajasthan.gov.in/jdvvnI>

Tel.: +91-9413359049

NOTICE INVITING TENDER (TN IT-26)

Jodhpur Vidyut Vitran Nigam Ltd. (Jodhpur Discom) invites bids from competent agencies for **“Implementation of Revenue Management System in Jodhpur Discom on TOTEX (CAPEX+OPEX) Mode” against Tender no. TN-IT-26.”**

The work broadly involves deployment of web based and mobile based Revenue Management System along with other modules for sub-divisional working. The contract period shall be 3 years, which can be further extendable on same rates for one year (subject to consent of both parties). However, Discoms at its discretion may vary the quantity & Delivery or completion period as per RTPP Rules.

Mode of Bid Submission	Online through e-Procurement/e-Tendering system at http://eproc.rajasthan.gov.in
Tendering Authority	Superintending Engineer (IT) Jodhpur Vidyut Vitran Nigam Ltd., New Power House, Jodhpur Discom , Jodhpur-342003
Estimated cost of Project	Rs. 70 Crore (Excluding the data centre cost) for a period of 3 years
Contact Persons	R.N. Bishnoi, SE (IT) Phone: 9413359049 e-mail: SEIT.JDVVNL@rajasthan.gov.in
Submission of Banker's Cheque/ Demand Draft for Tender Document Fee (including GST @ 18%), with Sr. AO (CPC) in favour of Sr. AO (CPC), JDVVNL, Jodhpur (non-refundable), payable at Jodhpur, Rajasthan	Rs 5900/- upto 17/08/2021 upto 04:00 PM
Submission of Demand Draft for e-Tender Processing Fee with SE (IT) in favour of M.D, RISL payable at Jaipur (non-refundable)	Rs: 1180/- upto 17/08/2021 upto 04:00 PM
EMD/ Bid Security Amount is Rs. 1.40 Crore. As per as per Rajasthan Transparency in Public Procurement (Second Amendment) Rules, 2020 vide G.S.R.230 issued by FINANCE (G&T) DEPARTMENT NOTIFICATION Jaipur, December 18, 2020, the bidder shall have to provide Bid	Bid Security Declaration shall be furnished Upto 17/08/2021 upto 04:00 PM.

Security Declaration on Rajasthan Non-judicial Stamp Paper of Rs. 50/- (excluding surcharge on Stamp Paper, as per rules) against EMD/Bid Security according to Appendix A in favour of SE (IT), JDVVNL, Jodhpur	
Pre-Bid Meeting Date/ Time	19/07/2021 at 11:00AM at New Power House, Jodhpur Discom , Jodhpur-342003
Bid Submission Start Date/ Time	10/08/2021 from 06:00PM
Bid submission Last Date/ Time	17/08/2021 upto 02:00 PM
Date & Time of Opening of Technical Bids	18/08/2021 at 03:00 PM
Websites for downloading Tender Document, corrigendum, addendum etc.	http://eproc.rajasthan.gov.in . http://www.energy.rajasthan.gov.in/JDVVNL
Bid Validity	120 days from the date of opening of technical bid or 90 days from the date of opening of financial bid, whichever is later.

(R.N.BISHNOI)
Superintending Engineer (IT)
JODHPUR DISCOM

SECTION – 1

1. INTRODUCTION & OBJECTIVE

1.1. THEMATIC FOCUS

Jodhpur Vidyut Vitran Nigam Ltd, (JODHPUR DISCOM) has been established under the Companies Act, 1956 by Govt. of Rajasthan. The Jodhpur Discom has been created with the principal object of engaging in the business of distribution and supply of electricity in 10 districts of Rajasthan, namely Jodhpur, Pali, Sirohi, Barmer, Jaisalmer, Jalore, Bikaner, Hanumangarh, Sri-ganganagar, Churu. The power supply in the Jodhpur Discom is managed by 12 distribution circles i.e. Jodhpur City, Jodhpur District, Pali, Sirohi, Barmer, Jaisalmer, Jalore, Bikaner City, Bikaner District, Hanumangarh, Sri-ganganagar, Churu under three zones namely Jodhpur Zone, Bikaner Zone and Barmer Zone. Total no. of live regular consumers in Jodhpur Discom is approximately 45 Lacs.

Jodhpur Discom invites Bid for **“Implementation of Revenue Management System in Jodhpur Discom on TOTEX (CAPEX+OPEX) Mode” against Tender no. TN-IT-26.** The work broadly involves deployment of web based and mobile based Revenue Management System along with other modules for sub-divisional working. The contract period shall be 3 years, which can be further extendable on same rates for one year (subject to consent of both parties). However, Discoms at its discretion may vary the quantity & Delivery or completion period as per RTPP Rules.

In view of the above, the Revenue Management System so developed shall be a kind of Revenue Management System for Jodhpur Discom.

The successful bidder shall provide and maintain the **Revenue Management System** as per scope of work. **The State Data Center & Disaster Recovery Center shall be used for hosting / running the newly developed application for Revenue Management System (RMS). No new data centre creation or keeping server in existing data centre of Discom be considered.” Only essential hardware required for hosting RMS and its DR for be considered for hardware.** The RMS covers necessary software applications, various Hardware in Jodhpur DisCom offices, other infrastructure, manpower, stationary etc.

The Bidders are advised to study the tender document carefully. Submission of Bids shall be deemed to have been done after careful study and examination of the tender document with full understanding of its implications.

Presently, Business processes in JODHPUR DISCOM are running on software modules developed under R-APDRP and hosted at Data Centre/ Disaster Recovery Centre developed under R-APDRP situated at Jaipur and Jodhpur respectively. JODHPUR DISCOM now intends to develop a new system with latest technology, features as well as usable on Mobile Platform. The provision of **“Implementation of Revenue Management System in Jodhpur Discom on TOTEX (CAPEX+OPEX) Mode” against**

Tender no. TN-IT-26 shall cover the entire consumer and electrical network of the JODHPUR DISCOM. The scope includes any work needed in making live the application on the central application platform. Jodhpur Discom intends to enhance the productivity, efficiency of the business process, create a fully automatic online business process, document management etc.

The basic objective of implementation of Revenue Management System is as follows: -

- Reduction of AT&C losses
- Bring about Commercial viability.
- Reduce outages & interruptions.
- Increase consumer satisfaction.

The IT platform shall assist in capturing and validating the energy and revenue model together in a transparent manner with accuracy.

This specification intends to cover the following activities, services and works in respect of successful set up of Revenue Management System for the entire Jodhpur Discom area along with supply, installation, testing and commissioning of all necessary hardware, software and managing the facilities created under the scope of work with successful completion of acceptance test of hardware and software. Detailed scope of work under this package is listed at consequent sections/ clauses.

- a) Complete design, engineering, manufacturing, pre-assembly (if any), supply, installation, testing, commissioning and putting into satisfactory operation of all the equipment/ devices, envisaged software, systems and sub-systems and providing services.
- b) Providing engineering data, drawings and O&M manuals for Owner's review, approval and records.
- c) Packing, transportation and insurance from the manufacturer's work to the site including port and customs clearance, if required.
- d) Receipt, storage, insurance, preservation and conservation of equipment at the site.
- e) Furnishing of mandatory, recommended spares, testing / calibration of equipments on FOR site basis.
- f) Data migration, User training and Operational Support at field level
- g) Satisfactory conclusion of the contract.

In addition to the requirements indicated in this section, all the requirements as stated in other sections shall also be considered as a part of this specification as if completely bound herewith.

The Bidder shall be responsible for providing all material, equipment and services specified or otherwise, which are required to fulfil the intent of ensuring operability, maintainability and the reliability of the complete work covered under this specification. It is not the intent to specify all aspects of design and installation of associated systems mentioned herein. The envisaged software modules, systems, sub-systems and equipment/ devices shall conform in all respect to high standards

of engineering, design and workmanship, and shall be capable of performing continuous commercial operation.

Whenever a material or article is specified or described by the name of a particular brand, manufacturer or trademark, the specific item shall be understood as establishing type, function and quality desired. Products of other manufacturers may also be considered, provided sufficient information is furnished so as to enable the Owner to determine that the products are equivalent to those named.

Bidder is requested to carefully examine and understand the specifications and seek clarifications, if required, to ensure that they have understood the specifications.

Any deviation or variation from the scope requirement and/or intent of this specification shall be clearly mentioned under Deviation Schedule of the Bid Proposal Sheets irrespective of the fact that such deviations/variations may be standard practice or a possible interpretation of the specification by the Bidder. Except for the deviations/variations that are accepted by the Owner with or without financial implications before the award of the contract, it will be the responsibility of the Bidder to fully meet the intent and the requirements of the specification within the quoted price. No other departure from the specification except for the declared deviation indicated by the Bidder in his proposal shall be considered. Bids not complying with this requirement shall be treated as non-responsive and hence liable for rejection. The interpretation of the Owner in respect of the scope, details and services to be performed by the Bidder shall be binding, unless specifically clarified otherwise by the Owner in writing before the award of contract.

1.2 GENERAL INFORMATION OF BID

- 1.2.1 Qualification will be assessed upon meeting all the qualification criteria regarding the applicant's general and particular experience, personnel capabilities, infrastructure availability, financial position, system proposed, methodology and plans to be adopted as detailed in the Bidder's Technical Bid.
- 1.2.2 The Bidder, while submission of the Bids, has to ensure that, all the pages of the Bids are signed by the competent authority and also all the pages are numbered and properly indexed. JODHPUR DISCOM clarifies that the Bid of those bidders, who do not fulfil the requirements shall be considered as non-responsive and disqualified.
- 1.2.3 If any bidder fails to fulfil the Qualification Requirement (QR), his bid will be treated as non-responsive and no further correspondence/ clarification will be taken into consideration for the same.
- 1.2.4 Merely meeting the qualification requirements does not mean that the Bidders shall be short listed for opening of financial bid. The technical solution proposed by the Bidder must commensurate with the requirements laid down in the Tender document.
- 1.2.5 Concession in bid cost, EMD and PBG as mentioned here under shall be allowed to SSIs of Rajasthan as per the provisions of RTPP Act 2013 and Rajasthan Gazette Notification dated 19-11-2015, on furnishing of self-attested

copy of acknowledgement of Entrepreneurs Memorandum-II / Udyog Aadhaar Memorandum, along with an affidavit in Form-B of the Rajasthan Gazette Notification dated 19-11-2015.

1.2.6 The EMD/ Bid Security Amount is Rs. 1.4 Crore. However, the bidder shall submit Bid Security Declaration on Rajasthan Non-judicial Stamp Paper of Rs. 50/- (excluding surcharge on Stamp Paper, as per rules) against EMD/Bid Security according to Appendix-A in favour of SE (IT), JDVVNL, Jodhpur as per Rajasthan Transparency in Public Procurement (Second Amendment) Rules, 2020 vide G.S.R.230 issued by FINANCE (G&T) DEPARTMENT NOTIFICATION Jaipur, December 18, 2020.

1.2.7 The short listing shall be made considering all the technical parameters furnished by the bidder along with the technical offer. Consumer Base of Jodhpur Discom is approx. 52 lacs (45 Lacs Regular + 7 Lacs PDC) .

Note: Before furnishing the bid, the bidder may study the present billing and Customer Information system of Jodhpur Discom and may contact to Tendering Authority. The functional requirement of the current system and services to be rendered would be at par and/ or in addition to all the functionalities that are present in the current system. The bidder has to study the bill formats, various reports, MIS reports etc., that are currently being provided to ascertain the quantum of services.

FORM OF BID-SECURING DECLARATION

(On Rajasthan Non-Judicial Stamp Paper worth Rs.50/- + Surcharge on Stamp Paper as per rules)

Date:

Bid No. :

Alternative No. :

To:

Superintending Engineer (IT)

Jodhpur Discom, Jodhpur

We, the undersigned, declare that:

- 1) We understand that, according to your conditions, bids must be supported by a Bid-Securing Declaration.
- 2) We accept that we are required to pay the bid security amount specified in the Term and Condition of Bid, in the following cases, namely :-
 - (a) when we withdraw or modify our bid after opening of bids;
 - (b) when we do not execute the agreement, if any, after placement of supply/work order within the specified period;
 - (c) when we fail to commence the supply of the goods or service or execute work as per supply/work order within the time specified;
 - (d) when we do not deposit the performance security within specified period after the supply/work order is placed and
 - (e) if we breach any provision of code of integrity prescribed for bidding specified in the RTPP Act and Chapter VI of RTPP Rules.
- 3) In addition to above, the State Government shall debar us from participating in any procurement process undertaken for a period not exceeding three years in case where the entire bid security or any part thereof is required to be forfeited by procuring entity.
- 4) We understand this Bid Security Declaration shall expire if:-
 - (i) we are not the successful Bidder;
 - (ii) The execution of agreement for procurement and performance security is furnished by us in case we are successful bidder;
 - (iii) Thirty days after the expiration of our Bid.
 - (iv) The cancellation of the procurement process; or
 - (v) The withdrawal of bid prior to the deadline for presenting bids, unless the bidding documents stipulate that no such withdrawal is permitted.

Signed.:-----

Name :-----

In the capacity of : -----

Duly authorized to sign the bid for and on behalf of:-----

Dated on ----- day of -----

Corporate Seal: -----

SECTION-2

2. SCOPE OF WORK

The work mainly involves deployment of web based and mobile based billing system with base billing or spot billing or combination of these type of billing as well as Customer Information System along with other modules for sub-divisional working and monitoring.

The billing system shall be developed for "Monthly Billing" as well as "Bi-monthly Billing" which can be either base billing or spot billing with option of post paid or pre-paid or their combination, as per discretion based upon requirement of the JODHPUR DISCOM as well as directives from RERC, State Government or Central Government. The system should be capable to generate bills with required flexibility of duration. Generally, it may be fortnightly (only for selected Large Industrial Power consumers >125kVA Contract Demand and/ or NDS/ Mixed load or other consumers having contract demand >100kVA). The consumers having contract demand >125kVA shall be billed from central HQ location as per requirement. However, it shall be governed by the requirement of JODHPUR DISCOM and / or directives of RERC, without any extra cost during the entire contract period.

In general, base billing shall be adopted for high value consumers having sanctioned load >18.65kW/>25HP and spot billing shall be for consumers having sanctioned load ≤18.65kW/≤25HP. However, requirement of base billing consumers and spot billing consumers may be varied as per requirement of Jodhpur Discoms and /or directives of RERC and /or State Government. The Meter Reading shall be either through OCR /Probe / optical cable / manual reading / AMR through MODEM or Smart Pre-paid/Post-Paid Meters or Pre-paid meters.

THE PROPOSED WORK MAINLY COMPRISES OF FOLLOWING: -

- a) Deployment of web based and mobile based billing system with provision of "Monthly Billing" as well as "Bi-monthly Billing" which can be either base billing or spot billing with option of post paid or pre-paid or their combination, as per discretion based upon requirement of the JODHPUR DISCOM as well as directives from RERC, State Government or Central Government. However, **Billing of all the regular Consumers having certain tariff code/load/consumption shall be carried out on "MONTHLY BASIS" and others on Bi-monthly basis as per directions of RERC/ State Government. Currently there are approx. 4 Lakh consumers whose billing is being done on Monthly Basis & approx. 41 Lakh consumers whose billing is being done on Bimonthly Basis.**
- b) The successful bidder shall host the entire application solution developed by him on **the State Data Center& Disaster Recovery Center for hosting / running the newly developed application for Revenue Management System (RMS).**

No new data centre creation or keeping server in existing data centre of Discom be considered. Only essential hardware required for hosting RMS and its DR be considered for hardware.

Bidder needs to provide proposed bandwidth size and complete, storage & network along with their bid response considering optimum requirement of hardware at DC & DR. Database and Application server software should complement each other and preferably have common tool to monitor like Health Check, Performance Analyzer, Operations Monitoring, Compliance Management, Patching, Performance management, administration and auditing etc. To achieve high availability database needs to be configured in active – active mode. Jodhpur DisCom shall hire the services of State Data Centre and DR Centre and the cost of hosting/ running charges for entire application and data base shall be in the scope of Jodhpur DisCom.

- c) The successful bidder shall make provision for integration with Centralised Customer Care Centre Module for Revenue Management System without any extra cost to the Discom. Also, the Centralised Customer Care Centre module shall be seamlessly integrated with the other all softwares modules in this RfP without any extra cost to Discom.

d) **SCOPE OF APPLICATION'S FUNCTIONALITIES AND SOFTWARE SYSTEMS**

S No	Software Module / SERVICES
1	Generic features of the Software Solution/System
2	Core Billing System
3	Revenue Management System (New Connection / Collection/ Disconnection & Reconnection)
4	Feeder & DT Information System
5	GIS Information System (GIS tools for capturing various network viz. Attributes, consumer indexing, creation of Single Line Diagram in hierarchical (Parent Child) views etc.)
6	Consumer Information and Service System with Consumer Mobile App. and Web-self services portal.
7	Vigilance Module
8	Mobile Apps Development, Deployment and Maintenance Field Services App (Spot Billing, Collection, Meter Installation, Meter Change, Disconnection, Reconnection, Geo-tagging & Single Line Diagram Creation, Officers Mobile App., Consumer Mobile APP, Vigilance Mobile App, Mobile App for Field Operations, Meter Testing / JIR App.)
9	Energy Audit
10	Meter Data Information System
11	Management Information System Dashboards and Reports

12	Functionality for State of Performance (SoP)
13	System Support with Ticketing
14	SPECIAL FEATURES & CONDITIONS
15	IT & OTHER INFRASTRUCTURE TO BE SUPPLIED
16	MANPOWER DEPLOYMENT
17	DETAILS OF THE SUB DIVISIONS, DIVISIONS, CIRCLES, ZONAL OFFICES IN DISCOM
18	TO SUPPLY STATIONERY & CONSUMABLES
19	OUTPUT AND MIS REPORTS & DATA ANALYTICS
20	NEW CONNECTION REPORTS
21	IT Tool for Penalty calculation and Price variation calculation

Other General Features:-

- (i) Android Software/Mobile Apps for Smart phones for Metering, Billing & Collection.
 - (ii) Report Builder for report customization, generation, printing, exporting & publishing.
 - (iii) Business Intelligence Tool for Analytics and customized MIS Dash Board
 - (iv) New connection management with required web and Mobile App.
 - (v) Cash Collection management with required Web and Mobile App.
 - (vi) Meter management with required Web and Mobile App.
 - (vii) Mobile applications for DISCOM Offices and Consumers.
 - (viii) Web and Mobile Application's for Feeder In charge.
 - (ix) Web Application, Mobile apps with integrated GIS tools for capturing various networkviz. Attributes, consumer indexing, creation of Single Line Diagram in hierarchical (Parent Child) views etc.
 - (x) Development of Management Information System for information gathering of important parameters through mobile and Web Application.
 - (xi) Document Management System
 - (xii) Any other software/system/App for delivering the intended scope of the tender
- e) All required internal & external systems (like NPP, URJA App, 11kV RFMS, ERP, Smart Metering, DT/ Feeder/Consumer/Prosumer Metering, ABT metering, Pre-paid metering, Net-metering, Open Access, SMS Gateways, email Gateways, e-Mitra & various payment Gateways, App, PFC/ REC/ BEE/ EESL/ CEA/ NIC/ DoIT portals/UrjaMitra, VidyutSaathi / R-APDRP portals/ Discoms DT/Consumer AMRsystem/ RT-DAS/ SCADA-DMS/ ERP systems, Revamped Reforms Based and Results Linked Distribution Sector Scheme etc. developed under various IT Projects, any other state/ central Government portal and any application developed shall be integrated with the Modules proposed to be developed under this project as per modules envisaged in this RfP during entire contract period etc.) shall be

seamlessly integrated on a continuous basis using an integration middleware layer and/ or server without any additional cost to Jodhpur Discoms. The scope of integration of external systems includes all IT systems already existing and functional internal to the Jodhpur Discom or coming in future Governmental or Discom driven Schemes. The integration is expected to be preferably on-line real time and/ or batchand shall operate in an automated fashion without manual intervention. Any required Servers/ Hardware/ and network connectivity for integration as above shall be provided by the successful bidder.

- f) The Complete RMS application will host at State Data Center (Jaipur) and State Disaster Recovery Center (Jodhpur). Bidder is expected to list out estimated requirement of Virtual Machines (VMs), OS and other requisite software's & their license requirement and storage details alongwith proposed architecture in the technical response document. Only essential hardware required for hosting RMS and its DR be considered for hardware.

Follwing Services are availaible in the State Data Center, Jaipur and DR Center,Jodhpur of DOIT&C

- **Cloud/Virtualization –VMWARE**
- **Operating System – Microsoft Server Standard Edition / RHEL Standard Edition**
- **Storage –SAN/NAS**
- **Application Server – Websphere App Server (WAS) / IBM Puraapp / Web Logic/Exalogic**
- **Database sever – MSSQL / Oracle 12 c / Oracle-Exadata**

Any other Software / Hardware /services required for the offered system/solution to achieve the scope of work but not mentioned above shall be in the scope of bidder with out any additional cost.

- g) Brand New IT infrastructure shall be supplied, installed, commissioned and maintained for the project duration at the various offices of the DISCOMS as specified in the RFP. To provide and maintain the required Android based Smart Mobile phone with communication cable for meter reading, Bluetooth Mobile printer, Power Bank, Accessories etc., GPRS (4G or better) SIMs with necessary Data Packs as defined in the specification, warranty and insurance.
- h) DISCOM's shall provide space & electricity and requisite MPLS / internet connectivity with sufficient bandwidth and LAN connectivity at Offices at DC, DR Replication ,Corporate, Zone, Circle, Division and Sub Division.
- i) To provide the required minimum manpower at various locations as specified in the RFP
- j) To provide Stationery (pre-printed/plain) & Consumables for spot billing. Billing includes billing on monthly basis, base billing for high value & HT

consumers, payment receipts, notices to consumers, disconnection, termination, exception reports, reports, MIS and any other reports as indicated in the RFP. The vendor has to study the current system and the reports that are printed and shall assess the requirement's accordingly. Replacement of cartridge for Laser printers and ribbons for Dot-Matrix printers.

- k) Provide the Android based Smart Mobile phone with communication cable for meter reading, Bluetooth Mobile printer, Power Bank, Accessories, Probe for meter data download to Smart Mobile Phone automatically etc., GPRS (4G or better) SIMs with required monthly data packs.
- l) Any enhancement/process change/ change in tariff structure/change in administrative hierarchy, modification, any new development to comply RERC/GoI/GoR/Discom Orders for the RfP objective, new configuration, Updates, new integration requirements for all the software modules/ applications supplied during the tenure of the contract shall be included within quoted price.
- m) Data migration from the existing systems through a sustainable system. Bidder is expected to understand the existing data structure & do the required cleansing prior to migration of the commercial data. At least three years data is to be migrated. No payment shall be made for Data Migration. The bidder has to ensure that no data is lost in the process.
- n) Training to be imparted to the Discom's designated personnel of the system and its operation.
- o) The required SMS packs gateway shall be provided by Jodhpur DISCOM.
- p) All the requirements of the Rajasthan Guaranteed Delivery of Public Services Act (RGDPS, 2011), its rules/ notifications and Rajasthan Electricity Regulatory Commission (Standards of Performance for Distribution Licensees) Regulations, 2021 prescribed by Discom for various services shall be configured.
- q) The successful bidder shall study the Discom prevailing practices & processes and accordingly prepare the "FDS **DOCUMENT**" defining all the type of masters for Tariff, TCoS, RGDPS, SoP-2021 and its amendments and complete design document covering business process re-engineering and business need of Discom, requirement traceability matrix, flow charts covering all the business processes of Discom to better develop the software applications and to understand the steps of various processes and get them approved by work order issuing authority before commencement of all the software applications envisaged in this tender document.
- r) **Policy And Documentation:** Bidders will have to develop, document and implement the following:
 - (i) Data Backup, Archival and retention Policy
 - (ii) Security Policy
 - (iii) Business Continuity and Disaster Recovery Policy

- (iv) IT Risk Management Policy
- (v) Information Classification Policy
- (vi) Access Control Policy
- (vii) User ID and Password Management Policy
- (viii) Internet Access Policy
- (ix) IT Asset Management Policy
- (x) Incident Management Policy
- (xi) E-mail Security Policy

All the policy and procedure which will always ensure availability and security, these policies must be updated every year or as per requirements of JdVVNL. Bidder MUST design and implement the policy (with JdVVNL inputs) in compliance to the ISO standards (such as Information security ISO 27001). Design of Information Security Policy should necessarily include but not limited to the following policies to ensure IT security:

s) **Testing and User Acceptance**

- A. Testing and quality assurance in software development is more rigorous since each component must be more reliable if it is to be reused. A system is tested at various stages of development and deployment. For example, each component is tested as a unit for checking the correctness of its own code. Further, the component is tested with its dependent components. After final release of the entire set of components, system is tested for the correctness of system functionality. Finally, the components are further tested in simulated production load for performance and load analysis.
- B. All testing is responsibility of bidder and DISCOM shall undertake UAT once all testing is confirmed by the Bidder. The Bidder shall be responsible for the planning of the testing processes which includes preparing test plans and defining roles and responsibilities. The Bidder will be responsible for the co-ordination of the test preparation (consists of preparing test specification, test environment, test data, test cases) and execution (includes testing at various levels like unit level, integration level, system level and production). DISCOM will approve the test scenarios, cases etc. prepared by Bidder.
- C. **Test Plans:** The SI is expected to submit the test plans to DISCOM for approval. Test plans contains following items:
 - a. Roles and responsibilities of test team
 - b. Test Scenarios along with entry and exit criteria
 - c. Test specifications
 - d. Suspension and resumption criteria
- D. **User Acceptance Testing** - During the test scenarios definition, for each of the business scenario, an acceptance criterion is defined. Acceptance criteria include expected behavior of the s/w component and the expected results (data). Expected results form a part of the Exit Criteria. In addition to

expected result and behaviors, some conditions are also specified in the exit criteria. They can be:

- i. Number of bugs to be discovered for a functional module. This depends on size of the functionality and is an indicator of amount of testing done.
- ii. If any medium or low-priority errors are outstanding - the implementation risk must be signed off as acceptable by JdVVNL
- iii. All High Priority errors from System Test must be fixed and tested
- iv. Code Coverage
- v. Error (Exception) Handling

E. Acceptance Criteria: SI needs to get the acceptance criteria approved from DISCOM for all the functional components of the system. The Acceptance Criteria for each release into production environment will be agreed upon by SI in consultation with DISCOM prior to release from Testing to production environment. After installation, if any bug is reported or there is non-compliance to requirements then a proper procedure should be followed. End-user should report ("Change Request") to his/her supervisor about the bug that will in turn get forwarded to SI Project manager (PM). After the bug is fixed, it should be reflected in the production copy after testing it.

t) **IT /Cyber Security Audit:** A yearly audit of IT security and Cyber security practices by CERT-IN certified Third-party agency to assess and evaluate the implementation of security policy and vulnerability assessment. The report shall include the parameters as per the mutual agreement with DISCOM and rate the security implementation in three grades i.e. Satisfactory, Requires Improvement and Unsatisfactory.

- A. Security Audit shall include but not limited to vulnerability assessment, penetration testing, application security assessment, Mobile application assessment for entire infrastructure.
- B. Third party agency shall be responsible for implementation of information security controls and perform periodic assessment.
- C. It shall propose ways to enhance the protection of RMS Solution Stack & Supporting IT Infrastructure.
- D. Secure Configuration Review: Third Party Agency shall review the security configuration of RMS Solution stack and provide the detailed report that includes the recommendations for remedial actions.

u) **Business Continuity Plan (BCP):**

- A yearly audit of Business Continuity Plan (BCP) to ensure the adequacy, completeness and appropriateness of plan through various means including availability of technologies, processes, and people to implement the plan that all broadly covered under the umbrella of business continuity

and disaster recovery. The audit of business continuity plan shall validate its major components and parameters as per agreement with JdVVNL shall rate the performance of BCP activities in three grades i.e. Satisfactory, Requires Improvement and Unsatisfactory. It should be the responsibility of the SI and annual DR drills should be made part of it.

- The overall audit activities shall be carried out with an intent of "As-is" assessments to assess the current operational capabilities of dealers, distributors, service centers, suppliers etc. This activity shall take support of extensive use of data analytics to enhance the audit coverage and focus on "risks that matter". The auditor shall follow the 360-degree approach to identify and mitigate risks related to both operations and legal compliances. To benchmark against industry peers to implement the most efficient practice and policies.
- It should be a rigorous program management and quality monitoring mechanism to ensure seamless delivery of assessments despite large volume of system. The audit program shall be structured to complete the reviews in minimum time with no disruption to daily business activities.

v) **Follow-up Audit**

a. Post completion of audit assessments (Internal or external) carried out under the product, process & policy, and system audit may have the findings that require corrections and corrective action. Since most of the corrective actions cannot be performed at the time of audit.

b. JdVVNL may require a further follow-up audit to verify that corrections were made, and corrective actions were taken. JdVVNL may also conduct the follow-up audits to verify the preventive actions taken because of performance issues that may be reported as opportunities for improvement.

c. In case, the cost for a single-purpose follow-up audit is very high, it should be combined with the next scheduled audit of area. However, the decision to carry out a follow up audit shall be based on the importance and risk of the finding, shall be on sole discretion and cost of DISCOM.

2.1 APPLICATION'S FUNCTIONALITIES AND SOFTWARE SYSTEMS

2.1.1 Generic features of the Software Solution/System

This sections details about the solution requirements. The SI must propose a System that is best of the breed available in the market, complies with the Industry standards and is sustainable.

a) Application Architecture Requirements:

- i. The application and database tier should consist of clustered nodes on a fail-over configuration in order to provide a highly available system.
- ii. The system should be flexible and scalable to support Discom future requirements.
- iii. The architectural designs and patterns should be adapted to enable the high performance.
- iv. The system should include a fully configurable and extensible data model that is maintained during upgrades.
- v. The system shall be dimensioned to accommodate the ultimate size of projected consumer base.
- vi. The system should provide out-of-the-box, utility-specific capabilities, e.g. appropriate terminology, consistency with utility standards and workflows, and the capability to interface seamlessly with other utility-centric software.
- vii. The system should provide an intuitive user interface which is web browser structured, context-driven and process-centric user interface.
- viii. The system should be able to interface with other applications to extend the business flow across different applications as a generic capability.
- ix. The Technology platform should support Interoperability & based on Open Standards It should be able to inter-operate with other heterogeneous platforms.
- x. The System shall support all standard web browsers (like IE Edge, IE9, Google Chrome, Firefox) and shall not require installation of any specific client side software.
- xi. All the products proposed as part of the solution should be supported in India.
- xii. Agile standard development methodology should be adopted for Software Development, covering the entire SDLC (Software Development Life Cycle)
- xiii. Identify and Integrate with all internal and external systems and services as per the requirement of the proposed system.
- xiv. The System shall be integrated with communication channels like SMS Gateways, Payment Gateway though it's in-built capability.
- xv. The Solution should be e-Mail Gateway to send various e-mails to consumers & employees
- xvi. The RMS should have capabilities to define role / user group / user type etc. and having access of system accordingly.
 - o Define Role-wise add/ edit/ view/ delete rights for each Entry Form/ Report in all modules
 - o Digital Time and User Stamping of each transaction
 - o Online monitoring of the User activities using user activity logs

- vii. System will maintain Audit Trail related to access to specific elements of the application. This audit trail should provide a facility to trace the path of changes in application software and provide indications of possible areas of misuse.
- viii. All tools required for load testing and performance testing should be as per industry standards. In case any third-Party tools are required, the same are to be arranged by the SI for this project on its own cost.

b) Service Oriented Architecture (SOA)

RMS solution components should support SOA principles to provide specific services using well defined interfaces. Identify opportunities for cross-functional components or subsystems and implement them in such a way that there is an opportunity for reuse. This defines integration architectures based on the concept of a service and becomes relevant especially when there are multiple applications in an enterprise and point-to-point integration between them involves complexity.

c) Integration and Support for API / Microservices Driven Design

Jodhpur DISCOM envisages RMS as a system API/ Microservices driven architecture at the core of it. RMS system features can be accessed via any user interface (internal or 3rd party applications) which shall work on top of these API/Microservices. Adoption of open API/ Microservices and open standards are of paramount importance for the JdVVNL RMS system. Data access should preferably be through API/Microservices, application should access data directly from the storage layer or data access layer. Openness must be supported by open standards and vendor neutral API/Microservices and interfaces for components should be used/built.

- i. The integration middleware should use Service Oriented Architecture (SOA) and/or other forms of Application Program Interfaces/Services or Micro Services and use publish/ subscribe mechanism.
- ii. The integration mechanism adopted must have minimal impact on the existing systems.
- iii. The access to data will only be through business rules/validation/workflows.
- iv. The integration middleware/interface must validate the Data to be integrated.
- v. System must maintain integration logs that confirm the success or otherwise of the interface, complete with control totals

d) API based approach for Integration

Integration with other systems is a critical requirement for RMS system and JdVVNL envisages RMS to adopt Open API as the guiding paradigm to achieve the dynamic integration goals. RMS system would develop a portal (for DISCOM users and G2C) & Mobile app but that would not be the only way for interacting with the RMS system as the consumers may have choice of third-party applications, which will provide all user interfaces and convenience via desktop, mobile, other interfaces, will be able to interact with the DISCOM RMS system. These applications will connect with the RMS system via secure RMS system APIs. This architectural approach has been taken as the UI based integration through a ubiquitous web portal requires manual interaction and does not fit most consumption scenarios. DISCOM envisages the below benefits from API based integration:

- i. Consumption of services across technologies and platforms (mobile, tablets, desktops, Kiosks etc.) based on the DISCOM business requirements
- ii. Automated exchange (upload and download) of data
- iii. Ability to adapt to changing business rules and data exchange models
- iv. Integration with JdVVNL application software landscape (ERP, RFMS, Smart Meter, CCC, SCADA, Consumer Mobile App, etc.) that DISCOM internal users and consumers others are already using for their day to day activities.

Bidder shall provide the approach and methodology (A&M) for integration.

e) Ease of Management

The solution must factor capabilities and features that allows for ease of management and troubleshooting. The underlying technology needs to be user friendly. By having easy to use principle, training can be kept to a minimum thereby aiding IT change management and the risk of using a system improperly can be minimized. The solution should provide support:

- i. Support maintenance, enhancement and refactoring of the solution should be possible with minimum or no architectural changes so as to minimize the time required for changes.
- ii. Even where Architectural / DB Schema changes are required, the change implementation should be designed to be carried out in effectively minimal time.
- iii. Administering the solution with minimal user intervention and using role-based administration, well defined user interfaces and access policies.
- iv. Ability to log and report at a sub-system level state, health of the solution. It shall also log different events encountered by the subsystem.

f) N-Tier / Modular Design

The application user interface, logic, data must be separate. The logical design of components, subsystems, application systems and databases will be ideally partitioned. These partitions shall have well-defined interfaces established. Logical boundaries are needed to separate components from each other. Modular design is more adaptive to changes in internal logic, platforms, and structures. It is easier to support, is more scalable and supports interoperability.

g) Backup and Recovery

1. Objective of Data backup solution is to

- i. To maintain a centralized backup of all the transactions/activities carried out from each node in order prevent any data loss ease restoration of data as and when required
- ii. To make data restoration in case of any data loss
- iii. The Bidder must implement suitable solution which will ensure that backup is done in fast, efficient & reliable manner without putting much load on the existing infrastructure
- iv. The solution should be for automating backup solution including latest features such as data encryption etc
- iv. It may also be noted that all the activities in the IT operation are subject to audit /inspection by Security Auditors. Selected Bidder must take same into consideration while delivering the desired services

h) Dynamic Configurability of RMS

Configuration of RMS should allow DISCOM to implement changes based on changing business requirement on the fly and dynamically. All configurations items & parameters such as policy decisions, Billing determinants / rule / engine, business rules, etc. shall be configurable centrally within RMS system. RMS system shall provide facility to the DISCOM decision makers to add new or edit/delete existing tariff, business rules / policies or make changes with appropriate permissions, control and audit trail. Managing configuration centrally shall ensure single source of truth is used across RMS application components & DB. RMS should decouple the business parameters /rules /master data from in the solution architecture and make them configurable this shall allow DISCOM higher flexibility.

i) RMS solution stack Security

- System shall provide different and unique login IDs for all the users of the system and track all activities of all the logins and maintain audit trails.

- User credentials for external and internal users shall be stored in separate repositories.
- The system will be able to grant specific access rights to each login or group of logins as per the business requirement and policy. The application software shall be flexible enough to grant access to the users through a web enabled GUI.
- The system should have Single Sign-On (SSO) feature (i.e., a user logs on once using individually defined user name and password, which permits the appropriate level of access to all applications).
- The application should avoid not allow usernames and passwords unencrypted over the network.
- Authentication and Access to RMS solution stack should be as per industry best practices and DISCOM role hierarchy and security policy
- Support Workflow for various requests, review and approval required within various business processes
- Web based System Administration of entire RMS solution stack
- RMS solution stack should have Configurable Function Access Control
o RMS solution stack should have Configurable Data Access Control

2.2 BILLING SYSTEM

2.2.1 Core Billing System

- a) The core module of Billing is to be provided, configured and customized as per the prevailing/latest Terms& Conditions of Supply as per RERC directives, business processes of JDVVNL and time to time directions of the State/ Central Govt./ RERC/ CERC/CEA,
- b) The web-based and mobile based application shall have the most robust, flexible and configurable billing engine for generation of bills on various modes and technologies that are adopted currently by the utilities thus providing the required flexibility to the Discom in adopting to the latest technology advancements for effective, transparent and timely billing.
- c) The system shall invariably support Spot Billing, Automated Spot Billing, Photo Spot Billing, Base Billing, Batch billing for consumers having load below 18.65 kW etc. Base Bills shall be generated for consumers having above 18.65 kW loads either by obtaining the reading directly from the OCR /Probe / optical

cable / manual reading / AMR through MODEM or Smart Pre-paid/Post-Paid Meters or Pre-paid meters.

- d) The system shall invariably provide pre-paid billing and collection system and also allow integration with existing pre-paid system functionalities available in smart metering/ AMI and other pre-paid billing and collection.
- e) The Spot billing software shall be developed for machines based on operating system like Android. The ANDROID software shall also have provision for automated data downloading from the consumer meters, required protocols, API's shall be provided by the Discom. In case if the utility wants to use the Spot Billing machine only for reading capture the same shall be made available as configuration option. The Android based Smartphone and software shall be configured for spot payment collection and Spot capturing of other field information.
- f) Major features shall include:
 - i. Capturing monthly/bi-monthly / or on any time span meter readings of LT consumers by meter inspectors/ Meter Readers/FeederIncharge, via Spot Billing Machines Android based Smart Mobile phone the help of suitable ANDROID application
 - ii. Online upload of meter reading data via GPRS if connectivity is available else store the readings locally and upload whenever connectivity is available.
 - iii. Option of upload of meter reading data via WI-FI when the Feeder In charge/Meter Reader returns to the AEn Office premises at the end of the day.
 - iv. Downloading of Consumer Master Information into the Smart Phone online via WI-FI/GPRS.
 - v. SMS to consumers once the Meter Reader starts his meter reading operations in his designated area. The SMS packages shall be provided by DISCOM.
 - vi. SMS to the consumers for the billing amount in the Bill generated for continuous 3 days before due date of the bill or configurable.
 - vii. SMS to consumers whose meter could not be read by the Meter Inspector for No Access. The SMS packages shall be provided by DISCOM.
 - viii. SMS to consumers with reading details after the reading is captured. The SMS packages shall be provided by DISCOM.
 - ix. System should be capable to capture Billing Parameter e.g. kWh, KVAH, KVA,Billing kVA etc.

- x. Automated meter reading (AMR) for CT/ CT-PT operated meters and in future, Smart Meters, thus doing away with manual readings
- xi. Bill processing in centralized bill server for specified LT on the basis of load and HT consumers
- xii. On demand generation of bills and closing of accounts as per prevailing TCOS, in case of voluntary disconnection for LT consumers.
- xiii. Bill Correction, part bills, consolidated bills, group bills etc.
- xiv. Provision of Auto and manual entry of sundries
- xv. Provision of Auto and manual entry of meter updates
- xvi. Provision of Auto and manual process for updating route sequence
- xvii. Auto and manual process for updating various key parameters as per the prevailing TCOS & Business rules of DISCOM & as per direction of GoR / RERC.
- xviii. Accounting of Installments, part payments, Govt. subsidies, wave offs etc.
- xix. Generation of Disconnection notice & Sending SMS for non-payment (Except Stay from the Court/Settlement committee/VCR monitoring committee, Competent authority)
- xx. Updating and maintenance of security deposit for LT & HT consumers
Maintainable SD calculation for LT & HT consumers
- xxi. SD interest calculation for LT & HT consumers
- xxii. Additional SD installment bill/ including generation of notices of enhance security as per prevailing TCOS of LT/HT consumers
- xxiii. Processing of Bank Guarantee & Letter of Credit for HT consumers.
- xxiv. Advance Payment facility.
- xxv. Consumer History View at least last 3 years, Meter History View, Export & import of Consumers from one location to another location.
- xxvi. Provision of transfer of consumers & all related modules information from one sub-division to another sub-division
- xxvii. Provision of creation & merging of Zone, Circle, Division, Sub-divisions & change of hierarchy of different offices.
- xxviii. Provision for Self bill generation by Consumer by sending Meter Photo and Meter reading through Consumer Self Services portal / Consumer Mobile App.
- xxix. Short message services for knowing bill amount, due date, previous payment history, download bill, updating KYC (email address, mobile number).
- xxx. The module shall have functionalities for inter division transfer of consumer master data and merging of accounting units etc.

- xxxi. The Module shall facilitate grouping of consumers based on various requirements for group bill payment etc.
- xxxii. The module shall facilitate billing of consumers having Net-metering, Smart/AMR Metering, Pre-paid metering, ToD Based metering, ABT metering, AMR based Metering etc.
- xxxiii. To leverage the benefits of Technology Platform established under Revenue Management System, a commercial back office shall be set up in at Sub-division, Division, Circle level to achieve the objectives of improving billing efficiency, prompt response to billing related complaints and increase customer satisfaction. Provision in the application shall be developed and deployed for each sub-division and accordingly, a front desk shall be established at Sub-division/ Division/ Circle level to register complaints especially commercial complaints with provision of escalation to higher authorities. The type of commercial complaints shall be provided by Discom which shall be configured for helpdesk. The Commercial Back Office shall take over all billing related functions of the sub-divisional office and shall perform major tasks of resolving consumer complaints within prescribed turnaround time. Besides, provision shall be made in the Core Billing Module with development of help desk to perform analysis of meter reading and billing data to extract exceptional cases, resolve exceptional cases with the help of sub-division technical staff inputs in order to reducing under assessment and cases of wrong billing thereby improving billing efficiency.

g) Special features for required for High Value Consumers i.e. LIP /MIP

- i. Secure import of meter readings & billing parameters into the system from third party systems. Provision to upload billing parameters from CMRI/MRI etc., directly into the system, both in batch and single read modes. System shall have provisions to e-mail the bills in pdf format to the consumers.
- ii. Bills should generated after duly considering the imports and exports of energy (wind power, solar power, IEX), changes of meters, change of CT/PT, ToD Slabs as per tariff and business rules.
- iii. High Value Consumer bills are to be printed on large format (A4 plus).
- iv. HT bills are to be provided in 4 copies for each consumer.
- v. The system shall have provision to generate advanced FNB bills and the same shall provide in 8 copies each for each consumer.
- vi. Security deposit to be adjusted as per discom defined processes.

- h) The system shall provision for accounting consumers with special meters like prepaid meters and shall support the entire meter-to-cash cycle or integrate with the third-party systems for enabling the same.
- i) The system shall have role-based user access and work flow-based entry and approval process in built. Login & Biometric based security shall be enabled for all such approvals and transactions performed. The system should also provide OTP based Login.
- j) The system shall also facilitate and support following processes by integrating with other systems:-
- Registration of mobile number, email ID
 - Duplicate bill
 - Registration for e-Bills
 - On-line payment of bills, demand deposit (New Connection, RCO, MCO, RCMCO, Name Change, Meter Shifting, Tariff Change, Testing of Meter, Load extension & any other etc.), pre-paid meters, enhance security etc.
 - Statement of electricity bills vis-à-vis payments
 - Viewing latest payment status
 - Daily consumption status for Smart meters
 - Application for new connection / additional load
 - Transfer of Supply
 - Correction in mailing address, mobile number etc.
 - Augmentation of load / regularization for installation of AC
 - Voluntary Disconnection activities
 - Handling of consumer complaints and their resolution
 - System for informing non-usage of electricity during a certain period of time due to absence
 - Reconnection of Supply
 - SD refund tracker
 - Viewing of meter information, consumption history and SD details
 - Energy Bill calculator
 - Power consumption guide
 - Reporting disruption of supply
 - Reporting power theft
 - Request for bill tariff change
 - Trust based Reading upload and Billing.
 - Net-metering for renewable energy systems.
 - Smart Metering/AMI and Pre-paid Metering.
 - DT-Consumer AMR system

- Feeder Monitoring System
- Urja Mitra Integration
- Updating information on various Govt. Portal & other portal

2.2.2 **Tariff & billing rule management**

- The software shall provide a UI based interface for configuring tariff and business rules easily manageable by Discom.
- The software shall have provisions for retrospective and prospective billing.
- The software shall have provision to calculate part bills with variable bill period.
- The software shall have provision of ToD based billing and ABT billing.
- The software shall have provision of billing for net-metering consumers, Smart Meters/ AML, Pre-paid consumers, AMR consumers in all categories of consumers.
- The software shall have a flexible, user configurable tariff /Terms & Conditions of Supply (TCoS) and business rule management interface and almost all the changes can be configured without changing at the code level.
- All the required change management for tariff change, change in TCoS, activity required as per directions of the State/ Central Government/ RERC/ CERC/ CEA etc. during entire contract period shall be done by the successful bidder without any additional cost to Discoms.
- Any requirement with respect to creation of new Sub-division, Division, Circle, Zone and their effects on consumer K. No., Feeder/DT Coding etc. shall be configured as per Discom requirement without any additional cost.
- Any requirement with respect to merger of existing sub-division, Division, Circle, Zone and their effects on consumer K. No., Feeder/DT Coding etc. shall be configured as per Discom requirement without any additional cost.

2.2.3 **Spot Billing Software & System**

- The Web Based and Mobile based Software shall have provision to create, update and modify route traversal plans as per the billing schedules. The primary route traversal plans shall be 11kV FEEDER WISE and secondary route plans shall be DT WISE.
- SBM (ANDROID Based Mobile Devices) Spot billing software shall facilitate bidirectional communication with the central server using standard mobile network (GPRS/EDGE/2G/3G/4G/LTE etc.).

- c) The Spot billing software on the SBM shall facilitate local storing of the data and based on the availability of connectivity the mobile data shall transfer the same to the central server.
- d) Automated data downloads with or without user intervention i.e. the pre billing data as per the route plans shall be automatically downloaded to the SBM (ANDROID Based Mobile Devices).
- e) Real-time data uploads to central server (bills)
- f) Meter readers / Feeder In-charge need not visit sub divisions.
- g) Features to downloading and uploading from central server, connecting through Wifi/GPRS.
- h) The SBM (ANDROID Based Mobile Devices) software shall be auto updated from central server for tariff, data validation and other billing rules
- i) The SBM machine shall be capable of generating bills both in online and offline mode. In offline mode, the bills shall be queued for updating to the central server and shall be updated once network is available in background.
- j) The SBM shall have the entire billing tariff built into it for generating bills along with incorporating all the business processes and rules associated with consumer billing, consumer status, meter status etc.
- k) The device software shall have options to capture the photo of the dial of the meter. Option to capture multiple photos to depict any abnormality shall also be provisioned.
- l) The device software shall have capabilities to record the GPS co-ordinates. The software should display the location accuracy for more accurate GPS capturing.
- m) The Software on the SBM shall be able to print the bill over to a blue tooth printer.
- n) The system shall have provision for Spot Cash Collection module with configuration option.
- o) Provision to load any other software shall be available and the same shall be developed and loaded as per the requirements of Discom.
- p) The SBM software shall have provisions to capture any other additional information like consumer mobile no, meter detail, Consumer Indexing Details like Feeder & DT, observations etc.
- q) If the Discom wants to implement automated spot billing, then the bidder has to facilitate the same by making the required changes in the software during the contract period. The required protocols shall be provided by the Discom.
- r) SBM software shall have provision to generate various reports as defined by Discom from time to time.

- s) SBM software shall have features to download the DC notices & Enhance Security Notices etc from Central Server.
- t) Smart Phones provided for billing shall be secured i.e. Upon power on the smartphone shall directly launch only the authorized apps of the DISCOM and all other feature of the smartphone that are not used for DISCOM purpose shall not be enabled/available to the user.
- u) The data stored in the Smart Phones shall be secured with encryption and shall be tamper proof.
- v) The SBM Software shall log all the critical events like app events, exceptions, system crash events, user events, network signal strengths, memory, data usage, battery usage and the same shall be available to be synced to the central server either upon user initiation or automatically synced to the central server along with the bill & other data.
- w) Automated Spot Bill generation by direct downloading of meter data to the Android Smart Phone from communicable meters. The software shall facilitate downloading of billing parameters or the complete meter data or any desired parameters as specified by JDVNL from time to time. The Android smart phone shall automatically generate the spot bill without manual punching/feeding of billing parameters. The SBM should facilitate for Bill generation within defined geo-peripheral as decided by DISCOM.
- x) The required Devices/Communication cables & accessories for establishing the connectivity between the meter with Optical/RS232/RS485 ports and the Android Smart Phone shall be provided by the successful bidder as per the requirement.
- y) The meter data downloaded including billing parameters shall be uploaded into the server software for further analysis.
- z) Bidder has to diligently examine and consider all the components required for enabling direct download of meter data from different makes/types of meters for automated spot bill generation for which requisite communication protocols shall be arranged by DISCOM.
- aa) System shall be capable to store Meter change, New Connection and any other changes of infra at consumer end and malpractices, anomalies in consumer premises / meter i.e. A-30.

2.2.4 Mobile Device Management Information System

Android Smart Phone device management module shall facilitate the management, administration, adding, removing, user management of ANDROID Based Mobile Devices'. In addition, the software shall have graphical user interface where the following features shall be available:

- a) To view the live status of device based on location, meter reader, sub division, division, circle, zone, DISCOM etc.
- b) Group and view the devices based on Meter Readers, Sub Divisions etc.
- c) The device view shall show the live details of the device indicating the operational hours, signal strength, battery status, last bill issued GPS location etc.
- d) Sub Divisional officers shall be able to trace the meter readers and monitor progress on Google map.
- e) The software shall have facility to log all the critical events of the devices as per the configuration.
- f) The Software shall have the facility to monitor the key parameters like battery, network, data usages.
- g) The software shall monitor the version of the software that is currently in the device and check for update, tariff and rule changes and update the same to the device.
- h) The software module shall have facility to trace the device life cycle.
- i) Any other feature that would increase the meter reading monitoring shall be made available as per Discom requirements from time to time.

2.3 REVENUE MANAGEMENT SYSTEM

2.3.1 Payment Collection

This module shall cover the following functional requirements:

- a) Handles the entire payment collection of the Discom including pre-paid system of billing and collection.
- b) Multi-tiered approach to handle operations at all levels
 - (i) Cashiers & Supervisors at the Cash Offices
 - (ii) Controlling Officers at Treasury Department/e-Grass/RTGS/NEFT
 - (iii) Other Discom Offices and Management
- c) Automatic generation of Cash Book
- d) Automatic generation of various Reports related to cash collection.
- e) Data integration with future and present ERP system for final accounting
- f) Integrates with other downstream IT Services of the company
- g) Role based security
- h) Extensive MIS to facilitate monitoring and Control
- i) Rigorous Data Validation Process to ensure data integrity
- j) Deployed Over a High Available Architecture
- k) Validation for deposit of cash only per bill as per prevailing TCoS/ Rules
- l) Validation for dishonored cheque deposit second time as per prevailing TCOS/ Rules

m) Facility for periodic reconciliation as defined by JDVVNL with the payments imported from other agencies in all aspects including bank reconciliation.

The payment collection module shall facilitate payment collection in various modes viz:

- a) Payment collection by Feeder In-charge / meter readers over spot billing machines.
- b) Payment collection by Discom officers using hand held device.
- c) Payment collection through ATP.
- d) Payment collection through dedicated cash counters.
- e) Payment collection through online payment gateways, banks /debit & credit cards, authorized third parties.
- f) Payment collection through E-mitra and other state government enabled kiosks/portals or systems.
- g) Payments collected by manual receipts (payment stubs)
- h) Payment collection through mobile app which shall further integrate with online payment gateway.
- i) Online Payment through digital wallets, Govt. Apps like BHIM, UPI Gateways and other future payment gateways or interfaces that may come during the tenure of the contract.

Other payment Collection features

- a) Provision to collect and account payments against bills and other miscellaneous heads. The payment collection system shall be secure and reliable and shall facilitate cash reconciliation at various levels.
- b) Payment collection software should have dashboards and MIS reports for monitoring payment collection and reconciliation at various levels.
- c) Payment collection module should have transaction based approval before the payments are posted and accounted.
- d) The system should have the flexibility to accept full, partial advance payments. The system should also have the facility to centrally change these settings from time to time.
- e) System should support group payment facility for acceptance of one single payment for set of consumer accounts. System should generate reconciliation reports for the same.
- f) System must be capable of handling centralized or decentralized payment processing. System should be built with cash counter which can be installed at sub division offices & accounting sections which should work on real time data synchronization basis.

- g) In case of internet is not available at sub division offices or internet is down for specific period of time then the system (spot billing devices and sub-division office) should have provision to work in offline mode.
- h) The generation of receipt and printing should be continued and data has to be stored in local system. The system should be capable of holding and population of data on central serves for 24 hrs of operations or in multiple batches based on the need so that the performance of the system should not hamper. On restoration of internet payment details has to be transferred to central server
- i) System must be able to generate & send SMS/Email automatically to customer for every payment received as per the requirement and directions of DISCOM.
- j) All payments should be associated with the login-id of the cashier or person who operates the cash counter. Each payment should include machine ID, IP, Credentials used, Payment centre codes at which they were received, unique receipt number.
- k) Standard QR code shall be generated and printed for all the base bills and spot bills & Demand Notices.
- l) System should support acceptance of payment by reading and scanning the QR code for bills issued through Spot billing device/ mobile device and base bills.
- m) System should have the flexibility of reversal of payments in case of cheque dishonour. Blocking of further payment by cheque till a defined timeframe.
- n) System should have the logic of defining the distribution of the payments against the bills based on the specific order or as defined by utility like Tax, Interest, Revenue etc.
- o) System should generate centralized collection report and closing of collection process (cash book) on daily basis with relevant approval.
- p) System should have the facility of generation of Advanced Security Deposit (ASD) notices.
- q) System should support daily, weekly, monthly payment reconciliation process.
- r) System shall have provisions to display payment received from various channels.
- s) Provision for Online collection against different business activities/processes/demand like Pre-paid Recharge, Enhance Security Deposit, NC, RCO Fee, MCO, Tariff Change, Name Change, Meter Testing etc. should also be available

2.3.2 Disconnection and Reconnection Management System

- a) The web based and mobile based software shall have provision to identify the consumers liable for disconnection and shall have provision to generate notices, lists, send email and SMS alerts to consumer as well as Discom official.
- b) The web based and mobile based software shall have provisions to generate various MIS reports for enabling effective disconnection and reconnection.
- c) The web based and mobile based software shall have work flow based rules for permanent disconnected consumers until they are permanently disconnected and dismantled including the process for adjustment of deposit and preparation of final bill and write-off's.
- d) The web based and mobile based software shall have provision to enable record on field disconnection status through hand held devices if desired by the DISCOM.
- e) The web based and mobile based software shall have facility to push the disconnection list and reconnection list to the mobile apps installed on the SBM (ANDROID Based Mobile Devices) for implementing disconnection and reconnection.
- f) The web based and mobile based software shall have provision to generate Disconnection notice as per Discom Norms, which can be downloaded and printed through Android based Smart Phone.
- g) Mobile app for effecting disconnection and reconnection shall be provided by the bidder.
- h) Mobile app user shall have the provision to capture the inspection details at the time of field visit. Complete flow shall be provided for the disconnection and reconnection.
- i) The system shall have work flow-based module for facilitating the disconnection to permanent disconnection and dismantling by generating all the required notices including the adjustment of deposit etc.
- j) The system shall support Meter Data Management System under Smart Metering/ AMI for Disconnection/ Reconnection.
- k) Provision should be there for uploading the compliance of Disconnection & Reconnection with required details as per defined process.

2.3.3 New Connection Management System

- a) Online Web Application based on Work Flow as per the Business rules, Tariff, Standards of Performance(SoP)-2021 & prevailing TCoS of the DISCOM, RERC/ Govt. of Rajasthan/ Government of India guidelines.
- b) The new connection module shall facilitate the entry of new consumers into the system either by the way of

- i. Keying in the data.
 - ii. Integration from a third-party system, existing legacy systems, future systems, consumer mobile App., Web-self-service, SWCS and Government Portals.
 - iii. Bulk uploads through excel/csv files etc.
 - iv. Online Web Application based on Work Flow as per the Business rules, Tariff, SOP & TCOS of the DISCOM
 - v. Provision for Online Application of Net Metering/ Solar Roof Top by the existing consumers.
- c) The module for work flow shall be for processing of new consumer application. The module shall be developed and deployed such that consumer may not need to visit Sub-division office for new connection and all applications for New Connection (Permanent & Temporary both), Extension/ Reduction of Load, Change of Name, Change of tariff category etc.
 - d) The application shall have inbuilt document management system for uploading and storing all the required documents for New Connection (Permanent & Temporary both), Extension/ Reduction of Load, Change of Name, Change of tariff category etc.
 - e) Facility to Consumer to track the status of the applications and shall receive email, SMS alerts on the application stage and status.
 - f) The modules shall incorporate all the existing stages and business rules involved in processing the new consumer application.
 - g) Comprehensive dashboards and reports shall depict the number of applications received and applications at each stage and if the applications are being processed within as the regulatory standards.
 - h) The web-based application shall also have comprehensive input screens for entering the new consumer details from the consumer application files. Scan and upload the relevant documents for future use. The entered details after approval shall result in the first bill generation of the consumer.
 - i) The module shall facilitate bulk importing of master data of consumers created from third party systems/schemes where bulk connections are released and data is provided in soft digital form.
 - j) The status of the applications, application pending at various stages shall be made available through drill down dashboards right from corporate level to the sub division or O&M level.
 - k) Provision for preparation of estimate based on standard issue rates (SIR) prescribed by RERC/ TCoS/ Commercial & Revenue Orders of DISCOM time to time.
 - l) **This module shall include the following features:**
 - i. Receipt of Application Details – online and Offline

- ii. Site inspection, wherever necessary and capturing of techno-commercial information from site.
- iii. Scrutiny of Inspection report by appropriate authority.
- iv. Sending of “Offer Letter” (intention to provide supply) and Security Deposit Bill to the applicant – through e-mail/ courier. Offer letter mentions the compliances that are required to be met by the applicant.
- v. Meeting of compliances by applicant including the payment of Security Deposit Bill.
- vi. Transfer of static as well as payment related data to Billing Software for generation of a new consumer.
- vii. Sending of data to Site Office for execution of job when all compliances are met – relevant data is transferred electronically to Site Office System (SOS).
- viii. Receiving job completion and meter installation / exchange related data electronically from SOS post execution of job.
- ix. Transfer of meter installation data to Billing Software for inducting the applicant as a Consumer/ Prosumer.

2.4 FEEDER & DT INFORMATION SYSTEM

- 2.4.1 It is intended that detailed/ certain parameters pertaining to 33/11kV S/s, 33kV Feeders, 11 kV Feeders and 11kV/0.433kV Three Phase and 6.35kV/0.24kV Single phase Distribution Transformers would be captured by the Feeder In charge / Discom Officers/ Officials for energy audit, performance monitoring, operation and management. Agency has to provide both mobile app and web interface for entering the required data, capturing the inputs, etc. The Discom will facilitate historical data to the successful bidder. A Unique Identification code shall be provided to each EHV GSS, 33/11kV S/s, 33kV Line, 11kV Feeder, 1-phase DT and 3-ph DT.
- 2.4.2 As Android Smart Phone with GPS capturing capabilities are going to be used, the software solution should have a GIS module wherein the consumer information, network asset information, any other information that is captured by the field personnel can be displayed on a GIS map with provision to edit, update etc. The various elements shall be distinctly depicted with different icons/colour etc. The main objective shall be to extensively use this module for depicting the consumer information, assets and for enabling and planning different day to day operation and maintenance activities of the DISCOM. The cost of the acquiring the necessary licenses if required shall be factored into the bid and the same shall be valid during the tenure of the contract. All the Licences shall be in the name of Jodhpur Discom as per work order.

- 2.4.3 A mobile app having functionalities to facilitate the field personnel for recording the various network elements for creating the single line diagram shall be provided. The back-end software shall have provisions for depicting the Single Line Diagram with options of expansions of LT network up to consumer level.
- 2.4.4 For capturing the various HT & LT components of the distribution network Feeder wise for creation and depiction in the form of a Single Line Diagram. The module shall facilitate the Authorized officers in accurately mapping the various branches, sub branches and multiple branches as per the actual site data. Provision shall be provided to update, edit/relocate or modify any asset captured.
- 2.4.5 Agency has to develop comprehensive MIS reports and Dashboards depicting the various parameters captured. The Drill down dash boards/MIS Reports shall have data grouping and data agitations at various levels i.e. Distribution Transformer, Feeder, 33/11kV Sub-Station, Sub Division, Constituency, Division, Circle, Zone and Discom level.
- 2.4.6 The bidder shall provide both the mobile app and web module in the software to facilitate the various functionalities of the Discom Officers/feeder In-charge. A brief of functionalities but not limited as under:
- a) Provision to create, assign, reassign, delete feeder & DT to authorized officers.
 - b) Provision to assign Activate/ Deactivate the Feeder & DT to authorized officers.
 - c) List the consumers connected to DTC, DTC connected to the feeder, Feeder connected to 33/1kV S/s, 33/11kV S/s connected to EHV GSS via 33kV Line.
 - d) Transformer Tracking System: - Based on the DT information available in the system, transformer movement process may be developed to track the transformer location & its working status after integration with relevant application.
 - e) Provision to enter the feeder reading/consumption manually or by integration at varying intervals for assessing the energy availability, consumption, losses etc.
 - f) Provision to enter the DTC reading/consumption manually or by integration.
 - g) Provision to Add/Modify/Delete the Feeder information like the Feeder Name, meter details, CTPT, initial reading, status of meters, supply information etc.
 - h) The software shall facilitate the Authorized officers in arriving at the energy audit at desired intervals.

- i) The Data in the mobile app shall reside local and shall assist the Authorized officers in monitoring the critical parameters without the necessity of actually accessing the central server.
- j) The software shall have alerts, dashboards, reminders to give 360 degree view of the energy consumption and related parameters for energy audit and monitoring purpose.
- k) Provision should be there for change & update in network hierarchy as per expansion in the network.
- l) Any other input and reporting formats that are required shall be finalized during the execution stage & tenure period with the selected bidder.

2.5 GIS INFORMATION SYSTEM

- i. The software shall facilitate consumer tagging as per the electricity distribution network. The binders can be re-organized substation wise, feeder wise / distribution transformer wise. During the initial 4 months the required information on the location of the consumer (DTC, Feeder etc.,) shall be provided by DISCOM/Meter Readers. The software shall have options to bulk upload the same and then organize billing as per 33/11kV Sub Station, 11kV Feeder, Town, Sub-division and DTwise.
- ii. The software shall have provision for tagging, re-tagging, updating features based on GIS referencing.
- iii. The system shall facilitate to capture electrical network asset details with geo-coordinates/references, consumer geo-tagging. The system shall also have facility to display various key parameters on the GIS Maps.
- iv. The software shall facilitate creation of route plans, route maps to enable efficient billing in a timely manner and to facilitate re-organization of existing networks, geographic are etc., as desired by the DISCOM.
- v. The software shall facilitate new consumer updating as and when new consumers are added.
- vi. The software shall have provision to implement billing at desired periods and thus suitably re-organize the route plans and consumer indices. **Bulk field electrical network re-alignments like updating of feeder code, TC reorganization etc., shall be facilitated in batch mode for making the changes quickly.**

2.5.1 Functional Requirement of GEO tagging (Assets and Consumers)

- a) The GIS module on Google map should be integrated with the various core processes of Billing / Collection / Disconnection/ energy auditing etc. The system

should have provision for capturing, storing, checking, integrating, analyzing and displaying geo data related to positions on the Earth's surface and data related to attributes of the assets / Customers in Discom area. Basic functionalities should be provided by the service provider is the following.

- i. Display of all Billing information data on the Google Map with status of the billed information. Requisite fee/ charges for Google Map shall be borne by the bidder.
- ii. Display of arrears information on the Google Map
- iii. Display of Collection information on the Map.
- iv. Display of the location information of the Meter Readers on the Google Map.
- v. Location MR / Consumer through Latitude, Longitude & Altitude Coordinates previously stored in the system.
- vi. Complete workflow of other systems should be seamlessly integrated with the core processes of the Billing and collection and no separate activity should be initiated to achieve the above objective.

Note: Discom does not envisage full-fledged GIS system, open-source GIS software's like Google Maps to display the various MIS other information as envisaged in the RFP which can be incorporate into the application should be provided. However, if any charges/fees is levied by OEM of such Google or other maps, the same shall be borne by the bidder.

2.6 CONSUMER INFORMATION & SERVICE SYSTEM

The following indicative requirements with regards to implementation of web portal & mobile applications to facilitate real time customer services:

- i. The Home page shall provide a brief description about the site, the various functionalities it provides and promotional features or any kind of advertisement for special programs can be placed in this page. Login Component is provided and registered users may login using their username and password. New Users can also register by clicking on the First Time Users Register link. The Forgot Password link helps the user to retrieve their password.
- ii. The Log In page shall ask the registered users for their username and password while the new members can also register through this page.
- iii. The user is asked for personal, security and account information in this page before registering.
- iv. The user is asked for his first name, last name, zip code, birthday and his primary email address before being provided with the security question.

- v. The new password is sent to the user by email / SMS to his primary email address or registered mobile number as recorded in his profile, on answering the question correctly.
- vi. Once the user has logged in, he can change his credentials i.e. Username and Password by clicking on the Change Credentials link
- vii. There should be a "My Accounts" page, which is the landing page for the users with multiple accounts. The screen contains a brief summary of all the accounts such as the account name, address, balance, due date and the account status.
- viii. There should be a "Single Account" page, which will be the landing page for the customers. The screen contains a description of the account. Any status messages pertaining to the account involving immediate user action is also presented here.
- ix. There should be a "Consumption History Page" that provides an account of the usage for the last 12 months graphically. A more detailed analysis is provided in a tabular format listing the meter reading date, the reading, consumption, number of days, charges etc.
- x. The Electricity Bill & consumption calculator popup is provided to help the user calculate the usage between any two given dates.
- xi. The Bill Summary page gives a record of the Billing amounts and Payments made by the customer over the last few months.
- xii. The user is provided with the options of registering in Online Bill and also continues with paper bills.
- xiii. The View and Pay Bill page presents a short summary of the bill. The user can also view the bill in PDF format by clicking on the link 'View Bill as PDF'.
- xiv. The user is provided with different modes of payment namely Credit Card / Debit card / Net Banking / Mobile Wallet etc. On providing the valid credentials payment can be made directly from the site. The online payment shall be processed through secured payment gateways
- xv. There should be provisions for the user to pay multiple bills.
- xvi. There should be a "Manage Accounts" page which shall help the user to manage all his consumer accounts from a single page
- xvii. There should be a "Service Requests" page that will allow customer to lodge request for services such as new connection, disconnection, load change, name change, category change, meter shifting, meter change, Bill Correction etc. with uploading required supporting document online depending on the regulatory/utility requirements, user is required to upload & submit the documents.

- xviii. There should be a "Service Status" screen which is read only screen which the user can view. Status of various pending requests for the customer such as load change, name change, category change, meter shifting etc. are listed here.
- xix. Under the "Complaint" page, user can log his complaint using a drop down menu and also enter some text with option for uploading the supporting documents. A "Complaint Status" page shall provide the user a read only screen to view the complaint status
- xx. "Report Power Failure" screen contains static data related to the power failure. The contact number is mentioned in case any power failure occurs. The user calls up the number and reports the power failure and necessary action is taken to restore the power connection.
- xxi. Update Profile screen enables the user to update his/her profile information. The user can edit the personal information and click on Update Changes button to save those changes.

2.7 **Vigilance Module** : - The work involves development of a robust and highly responsive mobile application for on-the-spot / online filing of Vigilance Checking Report and Monitoring of Vigilance Activities carried out by various officers of Jodhpur Discom. Also Web base solution for online monitoring of the same.

Functional Requirements / Process Flow after Login:

- i. VCR number generation
- ii. Capturing of geo-coordinates of the location and time of photo taken.
- iii. Vigilance Officer can select type of Consumer i.e. Existing Consumer or Non Consumer.
- iv. Vigilance Officer can select Name of Circle / Division / Sub-Division
- v. Vigilance Officer can search consumer using Binder No, K. No, Meter No, Account No, Mobile No and Name & Address.
- vi. For Non-Consumer, the details to be manually entered while for the existing consumers, data will be auto populated.
- vii. System should report earlier filled VCRs if any based on K No or on that Address.
- viii. Vigilance Officer can upload site photo / video and fill up the seizure memo.
- ix. Vigilance Officer can select the ACT (126,135,138) and mode of theft under Seizure Memo through the drop down option available.
- x. Vigilance Officer can fill the load details. For the authenticity and transparency, there should be provision of taking signature of consumer, vigilance officer and the associated vigilance team members

- xi. System should have facility to upload additional evidence like Meter Test report / Meter data Analysis Report / Photos / or any other documents against the particular VCR nos by only checking officer. System should keep audit trail of the same.
- xii. Charging / Assessment (Provisional & Final) is to be done in both the Mobile App and in web module. The process flow & algorithm for the proposed application shall include all the steps of calculation for civil liability, criminal liability, misuse charges and compounding charges etc. based on type of findings in the VCR by concerned Vigilance Officer covering theft, misuse, meter glass broken, meter burnt, meter defective, meter stop, meter body seal broken. Self reconnection, misuse of tariff, etc. as per TCOS, Electricity Act 2003 and latest amendments, DISCOM circulars.
- xiii. Assessment (Provisional & Final) Charging of the VCR shall be calculated automatically without human intervention. The App should have facility to calculate assessment as per DISCOM prevalent rules and show in detail i.e. all head of assessment. After the assessment is completed, the details shall be available to the checking officer.
- xiv. After assessment calculation complete VCR report copy should forward to customer (if email available or link to download VCR at their mobile number by SMS & DISCOM officers for further action.
- xv. The agency shall have to create login IDs of all the officers as desired by the Discom, irrespective of limitation of number of login IDs.
- xvi. The Discom officer hierarchy shall also be mapped and roles / powers shall be assigned to each user. For example, any user submitting the VCR information after 8 / 16 / 24 hours of actual vigilance time (or as decided by the Discom) shall be allowed only after being allowed by the next higher authority.
- xvii. Dashboard for obtaining various reports as decided by the Discom shall have to be made available by the agency.
- xviii. A web interface & App should have Dashboard of the application shall also be developed by the agency to view / download and filter VCR based on their state like Open / Closed / Pending for payment VCR & various reports in hierarchical order.
- xix. The information filled through the app including signatures should be downloadable in the Discom" s prescribed VCR format through the web interface. Also should have facility to generate & download various associated formats like seizure memo, assessments, notices etc. details will provided during FDS phase.
- xx. Various MIS reports as desired by the Discom shall be generated through the system, like Circle wise / Division wise / Sub-Division wise / officer wise / wing wise / month wise /week wise/ date wise / Type of vigilance case / consumer – non consumer, etc. Any other report as desired.

- xxi. The system should have facility to have realization amount detail against assessment.
- xxii. The system shall have the functionality to send SMS & e-mail to consumer / higher officer regarding the vigilance activity carried out. Requisite SMS & email gateway shall be provided by the Discom but necessary integration shall be done by the agency at no extra cost.
- xxiii. Web Interface & Mobile APP shall have identical functionalities
- xxiv. System should have facility to detail of FIR / Court cases against any VCR

It is clarified that the functional requirements given above are on indicative basis and modifications can be based on prevalent DISCOM practices, improvements suggested by Agency / Discom and actual systems in place at Discom. In order to understand and finalize the system requirements, the agency shall study the existing vigilance processes from VCR filling to closure of VCR and have detailed discussion with the Discom. Accordingly, the agency shall elaborate all the features and functionalities of the mobile app in the Functional Design & Specification Document (FDS) and submit to Discom for approval.

2.8 MOBILE APPS DEVELOPMENT, DEPLOYMENT & MAINTENANCE

2.8.1 The APPs developed should have the following basic characteristics and features:

- 1) The platform's used for development of mobile apps should support development of Hybrid Applications/Native Apps.
- 2) User Interface and User Experience of mobile App is to be designed to ensure that the service is user friendly.
- 3) Design of consistent visual elements and Web Portal & Mobile Apps architecture that is scalable and expandable.
- 4) Resolution independent Mobile Apps that will automatically expand/compress itself as per the device screen resolution and should be as per standards of W3C.
- 5) Delivery of consumer App and Officers mobile applications should be in the form of a published mobile application on each platform in the market place (Google/ Android Play store, Apple store and MS Windows etc.).
- 6) Integration with all existing and future applications through SOA (service-oriented architecture) - Web services/API/ JSON, Social Media platform etc.
- 7) The solution Framework, tools, technology of mobile App Development platform should be submitted along with technical proposal and should

be able to address the future scalability requirements, in terms of both application (to add new services) and infrastructure and backend.

- 8) The mobile App should provide an update feature in case of newly published version.
- 9) The mobile applications will be hosted on mobile applications platforms (App store, play store, Microsoft etc.) whereas the web portal/application and services and related APIs will be hosted on State DC & DR servers environment.
- 10) Provide technical documentation, design, architecture, technology, tools, etc. which will be used to develop Mobile Apps.
- 11) Integrate with the backend systems (user profile and registration, authentication, application processing, push notifications, etc.).
- 12) The data must be fetched from predefined data in central database and all the data should be directly updated to the central database.
- 13) The complete solution proposed must be SOA compliant and preferably based on secured open standards.
- 14) Vendor should have experience in hosting the mobile Apps and updating new versions as and when required. Vendor should provide all the details and should be part of technical proposal.
- 15) Mobile applications developed on development platform provided by the bidder should run on all types of handsets/TAB/Smart phone existing as well as new handsets coming in the market. The bidder shall provide upgrades/patches etc.
- 16) The platform should provide the means to manage subscriptions of push notification services etc.
- 17) Mobile applications to be implemented in pursuance to the International & industry standard implementation standards and procedure for successful implementation of the project.
- 18) The Agency shall be responsible for development, installation, commissioning, testing, certifying & performance tuning of the Mobile App.
- 19) The Agency shall also be responsible for knowledge transfer & training of application at requisite levels about the successful running of the application.
- 20) The Agency shall create, operate and maintain helpdesk & shall provide support for the entire contract period.
- 21) These shall also include support as application admin, system admin & database admin activities like security, patch against penetration testing, back-up etc. in production environment.

- 22)The Agency shall provide warranty of complete Application including its related software, licenses, hardware, etc. for the entire contract period.
- 23)The Agency shall also be responsible for knowledge transfer & training of application at requisite levels about the successful running of the application. The agency shall prepare FAQs section of the application and also tutorial videos / ppt to help customers how to use the application.
- 24)The Agency shall create, operate and maintain helpdesk & shall provide support for the entire contract period. B2B helpdesk should be available on all working days during business hours.
- 25)All admin activities of the application have to be managed by the agency.
- 26)The Agency shall provide warranty of complete Application including its related software, licenses, hardware, etc. for the entire contract period.
- 27)Any other work which shall be incidental in delivering the required scope of work successfully.
- 28)It is to be clearly noted that the functionalities which are to be provided under this scope shall be available on all of the following with compatibility features as applicable and prevalent in market: Mobile App for smart mobile phones / tablet / phablet etc. with android and iOS operating system. Application must support latest versions of all the Operating systems. Agency must also provide support for all the future upgrades in the operating systems during the entire contract period.
- 29)The Mobile Application should support both English & Hindi languages.
- 30)System should support exporting of reporting data to various forms like PDF/ XLS / DOC / Text formats etc. The various alerts, acknowledgements, receipts shall be able to be generated and shall be able to be exported in PDF.
- 31)The entire application design should be simple and provide intuitive user experience, light weight and easy to deploy.
- 32)Data transfer between Application, components, Web Application, Mobile Application and any third party applications must be in secured form.
- 33)Application and its sub-components shall support easy upgrades in future during the contract period without any additional cost to the Discom. Agency has to bear the renewal of license costs if any during the contract period.
- 34)Application and its sub-components shall be highly scalable to enterprise needs, reliable and robust. Agency needs to strike a balance

between security of information and the ease of accessing the Application.

- 35) The Agency shall submit the complete details of the each and every component of the Application namely software, hardware, databases, servers, architecture, etc. in understandable medium for adequate knowledge transfer to Discom Officials.
- 36) Ability for users to rate the Application and to add / surf comments of users. The Usage pattern of various functions on mobile application tool shall be recorded and presented to Discom as and when required.
- 37) System should support access control and authentication mechanism to make sure authorized people can change the status or upload / push the data / notification.
- 38) Application shall support notifications such as Push Notification over App, SMS, Emails, etc.
- 39) The responsibility of extracting the relevant information as desired from the existing and future billing and other systems of the Discom as well as sending the updated information back to these systems shall be of this Application. Any hardware / software along with relevant license shall be responsibility of the vendor.
- 40) All the Application and sub-components shall be updated on real-time basis.
- 41) It is to be clearly noted that apart from integration with the payment gateways, customer call centre databases and servers, if required under the scope, the Agency shall have to develop requisite Dashboard for Employees of Discom to facilitate operations covered under mobile apps. Dashboard user interface would be decided by Discom.
- 42) Online bug reporting tool shall be provisioned for registering issues faced in the application. Debugging activities should be taken on priority basis so as to have minimal interruptions to the Discom App users.
- 43) The front-view of mobile app shall be designed by Agency in consultation with Discom Officials and will launch once approved by Discom. The Apps currently prevalent in the market launched by private and public electricity utilities can be considered by the Agency.
- 44) The Mobile application which shall be provided by Agency shall be role-based (guest and user), dynamic, online and robust. The application shall provide Guest mode and User Mode log in facility for customers.

- 45) The mobile application should have feature / provision to monitor the activities / statistics / reports by the Discom.
- 46) The mobile applications should be hosted onto the public application stores like Apple iTunes Store, Google Play store & Windows store and the responsibility as well as cost of hosting the same on the applicable stores shall have to borne by the Agency. The Discom shall assist the Agency in any documentation required for hosting requirements in the name of Discom. Such hosting shall be initially for the period of contract and will also include any costs involved in updates to be provided on the respective stores. All the cost and responsibility for the same shall be on Agency.

2.8.2 Mobile Apps for Consumers

This shall support following features:

- i. To operate in Android, Windows and iOS operating systems
- ii. Access of 'Quick Bill Pay' where the consumer may pay the bill on the go by furnishing only the consumer id; multiple bills may be paid by this option
- iii. Consumer may apply for and check the status of New Connection (Permanent or temporary) / Extension/reduction of load/ Contact demand, Change of Name & change of category application. Consumer will also be able to upload the required document with request.
- iv. Consumer may access his personal details like Assessment, consumption & bill paid for the last 3 years, and so on; more than one customer id (if any) may be added to a registered account
- v. Consumer may access the Energy Bill / consumption calculator to check the energy consumption patterns.
- vi. Fresh complaints can be lodged and previous complaints tracked via the app
- vii. Consumer may also request for:
 - Request Duplicate Bill
 - Augmentation of load / regularization for installation of AC
 - Informing non-usage of electricity during a certain period of time due to absence
 - Registration of mobile no., email-id, DOB
 - Energy calculator
 - e-Bill registration
- viii. One touch call / e-mail facility/WhatsApp & any other social media app etc available in consumer App.

- ix. Reporting of cases of theft through the App
- x. Facility for accessing multiple accounts under single login to avoid switching between multiple login accounts. Facility to make online payment against multiple accounts by selecting the desired connection.
- xi. The consumer can stay updated with regard to the company, new launches, services, outages, useful tips, through social media tabs for Facebook, Twitter, and WhatsApp which are available in the App.
- xii.** Provision for Self bill generation by Consumer by sending Meter Photo and Meter reading through Consumer Self Services portal / Consumer Mobile App.
- xiii. Short message services for knowing bill amount, download energy bill, due date, previous payment history, updating KYC (email address, mobile number).
- xiv. View / Download Annual ledger, view other transactions / charges levied in bill.
- xv. Facility to apply for shifting from post-paid to pre-paid in case of Smart Pre-paid Meters/ Pre-paid meters.
- xvi. All consumers can get the following through the App:
 - a) A summary of their account details, metering details and other technical details.
 - b) Latest Bill along with the amount to be paid and the due date can be viewed.
 - c) Payment History of the last 12 months are available in the app
 - d) Consumption history of the last 12 months are available in the App
 - e) All the features of the consumer web self-services shall be available on the mobile app.
 - f) Duplicate latest generated bill in .pdf or .jpg format shall be downloaded from the App.

2.8.3 Mobile App for Officers

A comprehensive app for officers should be developed to monitor DISCOM performance, following features to be made available

- i. Login to the app should be able on designation and office hierarchy
- ii. There are various login levels should be– corporate level (Can view all circles), Circle level (Can view all Divisions), Division level (Can view all Sub-Divisions), Sub-Division level (Can view all sections). All hierarchy should further be extendable from circle up to subdivision level.
- iii. Dashboards should cover all key KPIs of the DISCOM.

- iv. There should be provision of on Demand Reports/Dashboards so that every time new reports/dashboard is developer user need not update app again.
- v. Mobile should be developed in Hybrid mode so that it works on both IOS and Android Platform.
- vi. Dashboards should consist but not limited to of Billing Progress, Arrears, MR Tracker, defaulters, MIS, Day wise Billing, Metering and Energy Audit.
- vii. Each of these reports should have drill down option.
- viii. Duplicate latest generated bill for any consumer in .pdf or .jpg format shall be downloaded from the App under their respective jurisdiction.
- ix. Should have feature of view rights of consumption history, payment details & outstanding details of consumer.

2.8.4 Field Operations App (Connection, Disconnection, Meter installation and Meter replacement)

Field Operations app should facilitate day to day operations of the field staff of the DisCom. Following are the field operation that should be made available in the app:

- i. Disconnection and reconnection module giving information about the arrears pending and route map for tracing the location of consumer premises.
- ii. Provision to execute and capturing the Disconnection and Reconnection details . Capture photos of meters and geo-location in the process of executing above activities and transfer to Server for authentication in real-time or whenever connectivity is available.
- iii. Capturing of Field inspection details in new connection process.
- iv. Provision for preparation of estimate for new connections processing as per the DISCOM prescribed provisions, rates etc.
- v. Provision to execute and capture New Meter Installation, Meter Change / Replacement activities. Capture photos of meters and geo-location in the process of executing above activities and transfer to Server for authentication in real-time.
- vi. Capturing the location wise asset details during asset replacement/repair for assets like Feeders, Meters, CT, CT/PT, Transformers, etc.
- vii. Printing Disconnection Notices, PF Notices, Lock Notices, Amnesty Notices, Enhance Security Notices etc. for issuing to consumers on site.

2.8.5 GIS survey App for Single Line Diagram of the 11 kV network with all electrical elements up to consumer.

- i. Data capturing (Feeder wise GPS location of DTC, Pole, Consumer & indexing with feeders & DT).

- ii. These apps should be capable of display of information on a Google Map on the Smart Phone.
- iii. Capturing various feeder information: The bidder shall capture the feeder information in a hierarchal manner
- iv. GIS survey app should capture the important parameters of the assets
- v. App should capture Photo of the asset (DT, Pole and consumer location) etc.
- vi. The captures information should be able uploaded to GIS system.

2.8.6 Meter Testing App

Meter Test report App would Facilitate to record the Meter Test Reports on the mobile App.

It should have the following features

- i. App should have level wise logins for testing officers i.e. Sub-Division, Division, Circle
- ii. It should have three JIR testing formats.
- iii. Should be able to record all the parameters required to create MTR report.
- iv. It should have the feature to download the reports in PDF format so that same can be shared to consumer at site using mail/whatsapp etc.
- v. It should record the GPS points of Meter Test Location.
- vi. Available Master details of consumer and meter to captured from billing system automatically.
- vii. It should auto fetch the details of last testing if JIR is filled earlier using this App.
- viii. It should have the option to capture/upload site photos.
- ix. It should have feature to capture digital signatures of consumer/testing officer.
- x. Testing reports as prescribed by Discom should be available of Concerned Officer/Subdivision Billing module logins.

2.9 ENERGY AUDIT

The Software shall have exhaustive Energy Audit features that is:

- i. The objective of the Energy Audit Module is to monitor important distribution parameters, capture hierarchical view of energy accounting, Network assets of Discom, intelligent analysis tools for plugging loop holes and identifying revenue leakage, adding into perform network planning and management activities
- ii. The Software shall have features to link the consumer to DTC, DTC to Feeder, Feeder to 33/11kV Sub Station and 33/11kV S/s to EHV GSS. The required coding convention in consultation with the DISCOM has to be adopted so that each asset/ consumer at a DISCOM level have a unique identification code.

- iii. The software shall facilitate bulk upload-based network assignment and realignment. That is the data for the realignment or alignment shall be provided in XLS sheets and the same shall be uploaded and the linking should get updated.
- iv. The system shall be able to abstract Energy sent data from respective systems and display it on the Dash Board.
- v. The system shall enable capturing of consumption recorded at DT, Feeder, Sub Station, EHV S/s, Ring Fencing/ Boundary meters for arriving at the Total Energy Input at various hierarchies for calculation of energy losses. Consumption/reading upload feature should also be there so that AT&C / T&D losses could be generated.
- vi. The Energy audit reports as per the formulas provided shall have facility to arrive at the assessed energy from billing system and others if any as specified by DISCOM to find out distribution losses and AT&C Losses.
- vii. The Drill Down Energy Dashboard shall facilitate drill down up to DTC from the Corporate Level.
- viii. The module shall have various standard and adhoc reports for displaying the energy losses at various network voltage levels and hierarchy levels.
- ix. The module shall facilitate merging of feeders, splitting of feeders based on the input file provided.
- x. The module shall facilitate import or consumption related details from third party existing/ future systems and the AMI/SCADA / RT-DAS / ERP/11 KV- RFMS/ DT-Consumer AMR systems, Revamped Reforms Based and Results Linked Distribution Sector Scheme, IPDS scheme etc. that may be deployed by DISCOM's during the contract tenure without any additional cost to Discoms.
- xi. The Software shall facilitate integration with existing & Future SCADA-DMS, Real Time Data Acquisition System (RT-DAS) / ERP/ Smart Metering-AMI / DT-Consumer AMR, Revamped Reforms Based and Results Linked Distribution Sector Scheme, IPDS schemes, 11kV Rural Feeder Monitoring System (11kV RFMS) implemented by RECTPCL for DISCOM's and future systems that shall be deployed for AMR/AMI without any additional cost to Discoms.
- xii. The data obtained for all the monitoring points shall be consumed for energy audit at 33kV incomer/ outgoing, 11kV incomer/ outgoing and DT Level and the audit details shall be made available for display of the same in dashboards, pre-defined reports, graphs, pushed to mobile apps, published on portals, exchanged with central and other state agencies/portal as and when authorized and intimated by DISCOM.
- xiii. EA Report Tracker shall be developed & deployed.

- xiv. The system should have provision to map the entire network assets with master-child relationship. The 220/132kV GSS Master, 33/11kV S/s master, 11kV Feeder Master and DT Master for all 1-ph and 3-ph DTs
- xv. The system shall have provision of consumer tagging and thus evaluation of Energy Sold at various voltage levels and asset levels for a defined period.
- xvi. The energy audit parameters and details shall also be displayed on google maps/GIS maps with various options and filters for display.
- xvii. Following Energy Audit Reports shall be generated as minimum from the Energy Audit Module :-
 - a) 33/11 kV Sub-Station Wise transformation losses.
 - b) Feeder wise, Sub-division wise, Division wise, Circle wise Average Billing Rate & Average Revenue Realisation Reports
 - c) SAIDI & SAIFI Report as per CEA guidelines
 - d) Discom level, Zone Level, Circle Level, Division level, Sub-division level, sub-station level, 11kV Feeder wise & DT wise AT&C Loss & Distribution Loss Report, with and without arrear for monthly, periodic and cumulative for all Direct, Cross & Split Feeders separately for various categories of feeders (Agricultural, Rural, Urban, dedicated Feeders, Industrial feeders, mixed feeder etc.)
 - e) Summary of AT&C Loss/ Distribution Loss Reports rangewise for Urban Feeders, Rural Feeders, Direct/Cross/ Split Feeders.

2.10 METER DATA INFORMATION SYSTEM

- i. The system shall support storage, archiving, retrieval & analysis of meter data and various other MIS functionalities along with validation & verification algorithms. It shall act as a central data repository. The system shall have capability to import raw or validated data in defined formats and export the processed and validated data to various other systems in the agreed format. It shall support built-in analytics & reporting and shall provide validated data for upstream systems such as Billing, Consumer Information System and Customer Care, Outage Management etc. The system shall be capable of supporting third party Pre-payment options.
- ii. The System shall also support the existing as well as future requirement of utility regarding Renewable Energy Systems like smart meters under KUSUM, Rooftop SPV plants, Net-metering, ABT Meters, Smart Metering/AMI, Pre-paid metering, 11KV-RFMS and DT-Consumer AMR systems.
- iii. A robust and scalable system solution is required for accepting, validating, and processing of non-AMI/legacy meter data taken manually, through Android Smart phones etc., from conventional and AMR meters with scale-up provisions. Subsequently, integrating multiple AMI Head end systems would be needed when Discom rollout Smart Meters commercially.

- iv. Meter data collection and data management (Direct or from third party system)
 - a) Meter data processing and generation of billing determinants for all types and category of consumers, including Net-metering and open access consumers.
 - b) Maintaining a single meter data repository catering to different HES / MDAS
 - c) Supporting VEE (Validation, Estimations and Editing). Real-time validations shall ensure ready-to use meter data.
 - d) Integration to Utility / Third party Consumer portal / mobile apps
 - e) Universal calculation engine with mathematical, logical and statistical operators
 - f) Built-in Analytics / Reporting feature
 - g) Exception management and Service Order generation
 - h) Capability to support Net-Metering billing & Net Billing
 - i) Ability to interface third party Prepayment application
 - j) Theft and revenue loss identification through usage pattern and through drop in consumption.
 - k) Capability to identify 'No consumption', 'Drop in consumption', 'Abnormal usage pattern', 'Irregular consumption pattern' and advance of registers in case of disconnected / not in use cases.
 - l) Capability to identify consumers with higher energy consumptions and consumers with lower energy consumptions, area wise / DT wise / category wise.
 - m) Analysis on maximum, moderate and minimum sale of electricity, area wise / DT wise, for growth analysis and subsequent network planning.
 - n) Perform load analysis for different groups and categories of consumers.
 - o) Analysis of VEE exceptions based on severity and other business rules.
 - p) Analysis of Smart meter rollout progress to help senior management track the progress.
 - q) Analysis of Smart meter events & activities performed.
 - r) Analysis of quality & timeliness of interval data received

2.11 MANAGEMENT INFORMATION SYSTEM DASHBOARDS & REPORTS

2.11.1 Development of Management Information System

At present certain information is being sent by various field officers to corporate office in certain formats where the same is compiled. The system takes lot of time for generation of information at field to compilation at corporate level. To smoothen

the process and curtail time of field officers, curtail use of stationery it is envisaged that there should be a web-based system where:

- a) Field officers from the level of Feeder in charge to the Zonal CE can provide key parameters/information on predefined manner to the system through mobile app and web app.
- b) The system after receipt of all such information shall compile and consolidate in a customized/specify format and publish through report builder.
- c) Frequency and number of reports which is possible through the input data on combination and permutation techniques can be customized through system as per specific user requirement.
- d) Vendor should develop the new form / format for collecting the information as per requirement of DISCOM.

2.11.2 Features of the system shall be

- a) Agency shall develop an Application which include feature of both Web-App and Mobile App for Discom Officials.
- b) The Application shall be based on the four pillars:
 - i. Information provided by the Field Level Officers through this Application
 - ii. Information extracted from the existing database servers of Discom
 - iii. Information which is provided as targets by the Corporate Office through this Application
 - iv. Information which is computed through information provided in (i), (ii) & (iii) i.e. analytics through What-If (Scenario Analysis)
- c) The mechanism for monitoring of Central and State Government Schemes shall also have to be done in discussion of Discom which means formats of these schemes and filling of information for these schemes.
- d) The Agency shall develop a feature in Application which will enable filling of information in set time periods for field level officers and target to be filled by Corporate Office.
- e) Level of approval shall be added for the information from the field before being integrated to the total system.
- f) Agency shall have to design the proper analytic computations for various other fields.
- g) The Information shall be compiled at various levels and adequate dashboard for various levels shall be created. The various reports after such compilation shall be published on the system.
- h) The information shall be collated in the intermediate database server which shall be taken up by Agency.

2.11.3 Reporting System & Dashboards

- a) The web-based system shall have dashboards that depict the various key performance parameters at various levels based on the user on real time basis in a hierarchy structure.
- b) The web-based system shall have an inbuilt Business Intelligence tool for analytics.
- c) A complete list of the existing and required MIS reports shall be provided to the finalized bidder for assessment.
- d) Further the Agency has to provide or implement any other reports, informations, dashboards etc., as required by the DISCOM during the contract period without any additional cost to Discom.
- e) The web-based application shall have provision for custom Report Builder which shall facilitate users to define and generate the reports.
- f) Bidder shall have provide a Separate Reputed BI Tool and Report Builder in the system with following features:
 - i. Capex Planning for DTR with everyday monitoring module
 - ii. Module for Customer Profiling
 - iii. Root Cause analysis for repetitive customer complaints
 - iv. Monitoring and predictive modules for Losses
 - v. Module for effective customer call grouping.
 - vi. Dashboard for daily / monthly monitoring by Management
 - vii. Module for effective control over material consumption for faults / new connections etc.
 - viii. Module for effective reduction in customer footfalls
 - ix. Dashboard to analyze customer growth, complaints & its duration etc. and operator shall be able to analyze this on map.
 - x. Dashboard for high-level overview of arrears, collectibles, write offs data, pay plans, and payment arrangements for the selected period.
 - xi. The Application shall have the features for building custom forms for gathering information and publishing on the system for periodical review by management. The various forms shall be designed, developed and deployed from time to time and published for entry/key in at various levels. The system shall also have facility for custom form building.
 - xii. The information collected from the various published forms shall be stored hierarchically and consolidated reports automatically formed at various hierarchy levels of sub division, division, circle, zone etc.

- xiii. The reports and dashboards shall have drill down features to drill down to the nth level.
- xiv. The forms shall be responsive and shall be accessible from any device like Mobile Phone, Tablets, Desktops, Laptop, Phablet etc.

2.11.4 Business Intelligence Tool (BI Tool)

The system shall have Business Intelligence tool of Repute Make for designing and publishing the reports in the application. Business Intelligence tool shall be able to create various MIS reports like analysis of consumer data, billing data, payment data, consumer profiling etc. Reports shall be embedded in the Application. Report should have drill down options. Software shall have facility for exporting in various formats like pdf, jpeg, excelsheet etc. Software shall have facility of sub-reports within another report, and any number of sub-reports can be nested inside a report. It shall support Hindi language using Unicode (UTF-8) or other native encodings. Feature should be there to save the format of report so that same type of report could be generated in future.

2.11.5 External / Internal Audit System

The system shall have facility to provide a Dashboard/UI for Revenue Audit by external and internal audit for various revenue and billing information at sub divisions and other offices. The system shall be capable to prepare the observation including undercharges, mainly the following records but not limited to be checked and audited:

- i. Checking of physical cash balances.
- ii. Checking record of cash section. Form A-9, PCCB/Scroll and PCB, timely remittances of money collected and reconciliation with bank statement.
- iii. Checking of output 6-A, B, C & D with stubs/ Scrolls & to report suspicious cases of embezzlement/ financial irregularities.
- iv. Reconciliation of amount received through PCCB and posted against consumer A/c as per MIS.
- v. Checking of debit raised or not in cases of dishonored cheques along with LPS and Bank Charges.
- vi. Whether cash collection is done by outside agencies, if yes, intimate name of Kiosk (under e-mitra/CSC) and DeGS where receipts to consumers are issued by affixing rubber stamp in place of computerized receipt.
- vii. Checking of consumer ledger with binder &/or other related records.
- viii. Checking of CC&AR registers for unauthorized/irregular debit/credit causing financial loss to the Nigam.
- ix. Checking of deficiencies in input advice and output reports related to billing i.e. CB-4, CB-12 & CB-15 with 16 ABC output reports etc.

- x. Checking of left out outstanding and negative balances against the consumers.
- xi. Detailed audit of various type of connections and ensuring correct billing thereof.
- xii. Ensuring 100% transfer of Master Data as well as outstanding from one billing agency to another or transfer from one sub-division to another/new created sub-division (if applicable).
- xiii. Compliance of DCO's, MCO's & RCO's and pendency of LR & SR in billing in case of meter change.
- xiv. Checking of billing of temporary connections.
- xv. Checking of debit raised / average charged in case of stopped / defective meters, theft, malpractices cases and other charges in view of compliance of A-30 Nigam's orders and arrange to propose debit in consumer's account.
- xvi. Correctness of billing in view of Revenue Manual of Discom, Discoms's latest amended TCoS, latest tariff and relevant circulars / orders issued by Discom time to time.
- xvii. Irregularities in the records of HT (other than large industrial power consumers), MIP and SIP consumers.
- xviii. Checking of Multiplying Factor as per JIR of consumers who are being billed on power factor basis.
- xix. Detailed audit of SIP, MIP and other category consumers having sanctioned/ connected load 25 HP (18.65 kW) or above and MDI has exceeded 50KVA thrice in a financial year and under assessment
- xx. Checking of billing of load extension / reduction cases.
- xxi. Under charges for any irregularities noticed during audit period in case of a consumer will be made for whole period irrespective of audit period.
- xxii. Checking of A-49 register in reference to pendency of SCOs for compliance, pendency of SCOs for billing, delay in issue of first bill and breach of priority in release of connections.
- xxiii. Checking of VCR cases for assessment & logical conclusions thereof.
- xxiv. Checking of settlement of dues along with implementation of decisions.
- xxv. Verification of pendency of Statement of Spot Debiting (SOSD) & compliance of previous Internal Control Review (ICR).
- xxvi. The verification of amount charged to the consumer in their accounts through CC&AR. Number and date of the same is to be recorded in Statement of Spot Debiting (SOSD) sheet duly signed from AEN and ARO of the sub division concerned.
- xxvii. Any other works related to revenue audit assigned by the Management.

2.12 Standard of Performance (SoP)

- i. Presently, a centralized call centre (CCC) is functional for the entire Discom area. It is functional through the CCC application.
- ii. The entire hardware, ACD and manpower has been deployed by the agency already engaged by Discom for the CCC work and is currently working 24x7.
- iii. The bidder / vendor under this tender will have to integrate with the Centralized Customer Care Centre with the RMS system in whole.
Vendor will have to develop an IT enabled system for the requirements of the Rajasthan Guaranteed Delivery of Public Services Act (RGDPS, 2011), its rules/ notifications and Standard of Performance parameters prescribed by Discom for various services shall be configured.

As per requirement of Rajasthan Electricity Regulatory Commission (Standards of Performance for Distribution Licensees) Regulations, 2021 issued by Rajasthan Electricity Regulatory Commission and all other provisions enabling in this behalf, Jodhpur Vidyut Vitran Nigam Limited herein after called Nigam, has defined Standards of Performance to consumers for its area of supply.

Standards of Performance

- a) The standards specified in Schedule-I shall be the guaranteed benchmark standards of performance, which are the minimum standards of service that Nigam shall achieve.
- b) The failure of Nigam to achieve the guaranteed standards of service shall entail payment of compensation to the consumer as per Schedule-II.
- c) The standards specified in Schedule-III shall be the overall standards of Performance which Nigam shall seek to achieve in the discharge of its obligations.
- d) These guaranteed standards shall be read with the provisions specified under the RERC (Electricity Supply Code and Connected Matters) Regulations, 2021 and other relevant Regulations, as amended from time to time.

1. Complaint Handling/Redressal Procedure

- a) The bidder shall provide software application for integration with centralized customer care centre. The software application should be capable of capturing & storing of all the data related to a complaint from registration of complaint till resolution of complaint.
- b) The software module shall have integration with provision to maintain the record of register complaints of following nature at the sub-stations and sub-offices of the Nigam:
 - a) Transformer failure
 - b) Supply failure
 - c) Safety related

- d) Electricity theft
- c) System generated registration number shall be immediately communicated to the complainant.
- d) The system shall have provision to link the mobile number of all the consumers in data base to be maintained by centralized call centre and provided software so as to facilitate fast and reliable communication between the Nigam and consumers.
- e) The complaint number shall be communicated to the consumer within 30 minutes of receiving the complaint, through the same mode as used by the consumer for registration of complaint.

Provided further that in case mobile number and/or email-id of the consumer has been registered, the complaint details shall also be sent through SMS and e-mail on the registered mobile number and e-mail id of the consumer within 30 minutes on receiving the complaint.

- f) Details of each complaint shall be recorded/ displayed as per Annexure I.
- g) System shall have provision that after the resolution of the Complaint, these shall be updated and record the total time taken for resolution of the complaint.
- h) The intimation of resolution of complaint along with date and time of resolution shall be communicated to the complainant by following the same procedure as used for communicating the registration number of the complaint.
- i) The CCC & Help Desk has provision to provide common services like new connection, disconnection, reconnection, shifting of connection, change in name and particulars, load change, replacement of meter, no supply.
- j) While other modes to provide services like paper application, email, mobile, website, etc., may continue, the CCC & Help Desk Module shall have provision to provide all services through a common Customer Relation Manager (CRM) System to get a unified view of all the services requested, attended and pending, at the backend for better monitoring and analytics.
- k) The CRM shall have facilities for sms, email alerts, notifications to consumers and officers for events like receipt of application, completion of service, change in status of application, etc; online status tracking and auto escalation to higher level, if services are not provided within the specified time period.

1. **Compensation Mechanism**

- a) Deployed software shall have provision to estimate and compute the compliance of the guaranteed standards of performance as specified in Schedule-I, for making payment of compensation to the affected person upon lodging of a claim for compensation. The compensation to be paid to the affected person shall be generated in form of report as per as

specified in Schedule-II.

Provided that for complaints related to “No Current complaints” , “no-current complaint due to meter” and “testing of Meters”, there shall not be a need to file the complaint for compensation purpose and the Nigam ,based on its records, shall credit the compensation amount in next bill as per verification & confirmation by DISCOM.

Provided further that the software shall have provision and shall be designed and maintained such that it captures above parameters and there is a gradual increase in the list of parameters, which can be monitored remotely and for which automatic compensation can be paid to the consumer. The system shall have provision to generate a periodic report as and when required.

Provided also that, if, there is a stay order by any Court, Forum Tribunal, or by Commission, staying the recovery of any dues from consumer and during the operating period of any such order, compensation shall become due but shall be payable to the Consumer only after the final decision of the case.

Provided also that no compensation shall be payable if there is any arrear due to be recoverable from the consumer.

- b) The software shall have provision to estimate and compute the total compensation that will be payable by the Nigam to a consumer by means of SoP-2021 shall not exceed 30% of the total Fixed Charges/Demand charges payable by the consumer in a given FinancialYear.
- c) There shall be provision in the software that in all cases of compensation, the payment of compensation shall be made only by adjustment against current and immediate future bills for supply of electricity by the Nigam. The details of the total compensation due and the amount paid there of shall be shown in every electricity bill of the consumer.
- d) The system shall have provision to intimate the prescribed guaranteed time as per Schedule-I and compensation formula for delay as per Schedule-II given in SoP-2021 to the individual complainant along with intimation of registration of complaints in order to create awareness about the guaranteed standards of performance.
- e) This module through consumer mobile app and Web self-service portal shall have provision to display the guaranteed standards of performance as per Schedule-I and compensation payable as per Schedule- II
- f) The system shall have provision to accept claim for compensation from consumer in case of delay not beyond 60 days of resolution of complaint.
- g) The module shall have provision to accept/ process the claim filed by the

consumer as per format at Annexure-II. Such claim can be filed either personally/e-mail/registered post/online/mobile app/help desk to the concerned officer.

- h) Every claim application shall be given a registration number which will be different from the complaint registration number. The module shall maintain online data of the compensation claim application and the action taken there on and provide to Jodhpur DisCom for further fully displaying the same on Nigam website.

The module shall have provision that in case mobile number and/ or email-id of the consumer has been registered, the compensation claim registration number shall be sent through SMS and email on the registered mobile number and email id of the consumer.

- i) The software module shall have provision to estimate / compute compensations within 24 hours from date of filing the claim of compensation giving details as well as reference of relevant regulations. In case of refusal of compensation, the system shall have provision to generate an appropriate order with respect to each claim of compensation within 24 hours from the date of filing the claim of compensation. The module shall have provision to provide all such orders to Jodhpur DisCom for display on the website of the Nigam and shall be communicated to the consumer as well.
- j) The aggrieved consumer shall not be liable to pay any fee for lodging a claim of compensation under this order before the Nigam, Forum or Electricity Ombudsman.
- k) The payment of such compensation shall be without prejudice to any penalty which may be imposed or prosecution which may be initiated for the failure of the Nigam in meeting the standards specified in SoP-2021.
- l) To claim the compensation under SoP-2021, the module shall have provision that the aggrieved consumer may file the claim within 30 days of expiry of the timeline as per SoP-2021 for each SoP parameter.

2. Following reports are to be developed:-

a. Submission of SoP Reports

- A. The system shall have provision to generate quarterly reports within 7 days at the end of each quarter during a financial year in the formats SOP-1 to SOP- 4 as per SoP-2021 regulations. These formats are as listed below;
1. Consumer Complaints and System Reliability Parameters
 2. Details of Compensation Paid

The DisCom may revise the formats through separate orders, as warranted necessary from time to time.

- b. The system shall have provision to generate reports related to complaints

and claim for compensation. Such reports shall be generated dynamically based on the search parameters including but not limited to type of complaint, status of complaint, Name of Division, Complaint Number, Compensation Claim Number or as directed by the Commission from time to time. The generated report as above shall be displayed on Nigam Website.

- c. The downloadable Manual in both Hindi and English language provided provided by Nigam shall be published on Consumer Mobile APP and Web-self services for making it available to consumers.

3. Exclusions of Events

The system shall have provision to consider following events for computation of compensation claims:-

- a) force majeure events such as war, mutiny, civil commotion, riots, flood, cyclone, lightning, earthquake or other force and strike, lockout, fire affecting Nigam 's installations andactivities;
- b) Outages due to grid failure or outage of supply from RVPN/transmission licensee grid substation for any reason
- c) Outages that are initiated by the National Load Despatch Centre / Regional Load Despatch Centre / State Load Despatch Centre , Discom/Franchisee

NIGAM'S GUARANTEED STANDARDS OF PERFORMANCE**1. Restoration of Supply:****1.1 No Current Complaint**

The Nigam shall restore the supply in case of supply related problem/ fault like blowing of HT/LT fuse/MCB prior to meter or at distribution transformer or due to loose connections at meter or service line within:

- a) 2 hrs. in Class 1 Cities
- b) 4 hrs. in Urban Areas
- c) 8 hrs. in Rural Areas

from the time of reporting of fault by the consumer.

1.2 Overhead line/overhead cable breakdowns

The Nigam shall restore the supply in case of its overhead line/overhead cable breakdowns within:

- a) 4 hrs. in Class 1 Cities
- b) 6 hrs. in Urban Areas
- c) 10 hrs. in Rural Areas

from occurrence of fault.

1.3 Underground cable break downs

The Nigam shall restore the supply in case of breakdown of its underground cable within:

- a) 12 hrs. in Class 1 Cities
- b) 12 hrs. in Urban Areas
- c) 24 hrs. in Rural Areas

from occurrence of fault.

1.4 Transformer failure

The Nigam shall restore the supply in case of failure of its transformer within:

- a) In case of Distribution Transformers
 - i. 8 hrs. in Class 1 Cities
 - ii. 8 hrs. in Urban Areas
 - iii. 24 hrs. in Rural Areas

from occurrence of failure.

- b) In case of Power Transformers (33/11 kV)
48 hrs. from occurrence of failure.

1.5 Scheduled outages

- a) Interruption in power supply due to schedule outages, other than the load-shedding, shall be notified by Nigam at least 24 hours in advance for planned shutdown and same day in emergent cases and shall not exceed 7 hours in a day. The supply should normally be restored by 6 pm. Nigam shall plan to undertake all preventive maintenance/periodical maintenance/service connection related activity during the scheduled outage. The notification of the scheduled outage shall be conveyed to the effected consumers by vide publicity in the local newspaper/display on the Discom website. Notification shall also be sent on the registered mobile number thorough SMS or by any other electronic mode.
- b) Scheduled outage/planned shutdown on industrial feeders shall not be taken except on weekly off days of the concerned industrial area in consultation with industrial areas association.
- c) Scheduled outage/planned shutdown on urban feeders shall not be taken except on Tuesday and Friday.
- d) Scheduled outage/planned shut-down on rural feeders shall not be taken except on Wednesday and Saturday.
- e) In case there is a planned/scheduled outage from 132 kV substations, the same shall be utilized by the Discom for planning its activity such as preventive/periodical maintenance/service connection related activity.

1.6 In case of unplanned outage or fault, immediate intimation shall be given by the Nigam to the consumers through SMS or by any other electronic mode along with estimated time for restoration. This information shall also be available in the customer care center of the Nigam.

2. Quality of Supply

2.1 Voltage Variations

The Nigam shall maintain voltages at the point of supply to a consumer within the limits as under

- a) +6% and -6% in case of LT supply
- b) +6% and -9% in case of HT supply
- c) +10% to -12.5% in case of EHT supply

and in case of variation, the problem shall be resolved within the time frame as given below:

- a) 2 working days of the original complaint provided no expansion/enhancement/ up gradation of the distribution system/ network is involved
- b) 15 days in case only LT line augmentation/up gradation and distribution transformer capacity enhancement is required
- c) 60 days in case new distribution transformer substation is required
- d) 120 days in case new 33/11 kV substation/augmentation of 33 kV substation is required from the time of reporting by the consumer.

2.2 Reliability indices

- a) The Nigam shall supply 24x7 power to all consumers. However, lower hours of supply for some categories of consumers like agriculture may be specified.
- b) Supply interruption benchmark- The smallest unit for supply interruption benchmark shall be 11 kV feeder. The following shall be benchmark-
 - i. 11 kV industrial feeder - Thirty numbers sustained interruptions per six months or fifteen numbers sustained interruptions per quarter.
 - ii. 11 kV urban feeder - Forty Eight numbers sustained interruptions per six months or twenty four numbers sustained interruptions per quarter.
 - iii. 11 kV rural feeder - Sixty six numbers sustained interruptions per six months or thirty three numbers sustained interruptions per quarter.
- c) Supply outage duration benchmark- The smallest unit for supply outage duration benchmark shall be 11 kV feeder. The following shall be benchmark-
 - i. 11 kV industrial feeder - Seventy hours per six months or thirty five hours per quarter.
 - ii. 11 kV urban feeder - One hundred forty hours per six months or seventy hours per quarter.
 - iii. 11 kV rural feeder - Two hundred ten hours per six months or one hundred five hours per quarter.

2.3 Benchmark of SAIFI and SAIDI- The following shall be the half yearly/ quarterly benchmark for SAIFI and SAIDI in the Nigam area-

- i. SAIFI - Twenty interruptions per consumer per six months or ten interruptions per consumer per quarter.
- ii. SAIDI - Thirty hours per consumers per six months or fifteen hours per consumer per quarter.

SAIFI and SAIDI- SAIFI and SAIDI shall be calculated as per following formula on half yearly/ quarterly basis for entire Nigam area-

$$SAIFI = \sum_{i=1}^n (A_i \times N_i) / N_t$$

$$SAIDI = \sum_{i=1}^n (B_i \times N_i) / N_t$$

A_i = Total number of sustained interruptions on Ith feeder for 6 months or quarter as the case may be.

B_i = Total duration of sustained interruptions on the i^{th} feeder during 6 months or quarter as the case may be.

N_i = Total number of consumers on the i^{th} feeder for 6 months or quarter as the case may be. (Mean of 6 months or quarter as the case may be)

N_t = Total number of consumers on all the feeders.

n = Number of 11 kV feeders in the Nigam area.

2.4 System reliability to avoid heavy fluctuations or short circuiting of lines

- (a) The Nigam shall erect and keep the system so reliable to avoid any damage to electrical equipments of the consumers on account of heavy fluctuations in supply voltage or short circuiting of lines.
- (b) If on any LT feeder some industrial/ motive load is also connected which results in voltage dip/ fluctuations for other consumers connected on the same feeder, such consumers having industrial/ motive load, shall have to take supply through separate feeder from the nearest transformer/ feeder pillar at its own cost so as to avoid impact of its load on other consumers and also make necessary technical interventions as per the guidelines issued by the Discom with the approval of the Commission.

- 2.5** Vender shall develop an IT enabled system for automatic record of reliability indices as per clause 2.2 and SAIFI and SAIDI as per clause 2.3 along with the comparison with the benchmark. The display of such figures should be available on the website/mobile app of the Nigam as well as the Regulatory Commission.

3. Meter Complaints

3.1 Testing of Meter

In case a consumer reports that meter is not functioning properly, a notice of 15 days can be given to the Nigam. Nigam shall verify the correctness of meter at site and if required replace the meter within 15 days from date of reporting by the consumer. However, no test fee shall be charged from the consumer at the time of reporting. If the meter is found to be defective or burnt due to reasons attributable to the consumer, the consumer shall bear the cost of new meter / security and test fee shall be charged from the consumer through subsequent bills.

3.2 Replacement of stopped/damaged/burnt meter

In case of stopped/damaged/burnt meter, the meter shall be replaced by the Nigam within twenty-four hours in urban areas and seventy-two hours in rural areas of its detection or date of intimation by the consumer.

Provided that in case of no current complaint on account of stopped/damaged/burnt meter, the Nigam shall replace the meter within 24 hrs of reporting by the consumer or detection by the Nigam, as the case may be,

unless it is established that the meter has been tampered or damaged in any way including excess load by the consumer, in which case, the Nigam shall replace the meter within 24 hours after depositing the amount of security of meter towards cost of meter by the consumer and other formalities, if any.

4. Shifting of Meters / Service Lines

4.1 Demand Note

The Nigam shall inspect and inform the estimated cost to the consumer within 15 days of receipt of application.

4.2 Shifting of Meter

The Nigam, on receipt of amount of demand note and necessary clearances/no objection shall shift the meter within:

- a) 7 working days in case of LT consumers
- b) 15 working days in case of HT & EHT consumers

4.3 Shifting of Service Line

The Nigam, on receipt of amount of demand note and necessary clearances/no objection shall shift the service line within:

- a) 15 working days in case of LT consumers
- b) 1 month in case of HT consumers

5. Release of New Connections or additional power

The Nigam shall release new connections to different categories of consumers under different situations, as per the norms specified in the RERC (Supply Code & Connected Matters) Regulations, 2021.

6. Transfer of ownership and change of category

The Nigam, on receipt of necessary documents certifying the transfer of ownership or change of category, as the case may be, shall transfer the ownership of the connection or change of category on the existing system, within 1 month.

7. Consumer bill complaint

In case of any billing problem, the consumer should approach the concerned Sub divisional officer or Billing officer personally or get the complaint registered through online help desk system. The consumer shall be given a registration number of the complaint. The Nigam shall resolve the billing problem within:

- a) 3 working days, in case no information is required to be collected

- b) 7 working days, in case some information is required to be collected by the billing authority.

In case the complaint is genuine, the Nigam shall extend the due date for payment of bill so as to allow at least 7 working days for making payment by the consumer.

8. Disconnection of supply

8.1 The Nigam, on receipt of a request and clearance of dues from the consumer along with disconnection fee, if any, prescribed by the Commission, shall disconnect the supply within:

- a) 3 working days in Class I Cities
- b) 7 working days in Urban Areas
- c) 7 working days in Rural Areas

8.2 In case of permanent disconnection, the Nigam shall refund all the money payable to the consumer such as security etc and issue a "No- Dues Certificate" within 7 days from the date of disconnection or from the date of clearing the admissible dues by the consumer payable to the Nigam; whichever is later.

9. Restoration of a disconnected consumer

The Nigam, on clearing the dues by a disconnected consumer, shall restore supply within 6 working hours. In case erection of infrastructure is required, it shall be as per the time lines given in the RERC (Supply Code & Connected Matters) Regulations, 2021.

10. Delivery of bills

The Nigam shall serve the bills on the consumers as per the timelines given in the RERC (Supply Code & Connected Matters) Regulations, 2021.

In case the consumer does not receive the first bill within timeline specified in the RERC (Supply Code & Connected Matters) Regulations, 2021, he may complain, in writing, to the Nigam and the Nigam shall issue the bill within seven days.

If any bill is served with a delay of more than sixty days, the consumers shall be given a rebate as per RERC (Supply Code & Connected Matters) Regulations, 2021.

Schedule-II

Compensation Payable by the Nigam

In case of failure of a Nigam to meet the Guaranteed Standards of Performance as specified in Schedule-I of these regulations, the following compensation shall be payable to the consumer by the Nigam -

Sr.	Ref no. of Sch.1	SOP Parameters	Compensation payable to each effected consumer
1. Restoration of supply			
1.	1.1	No current complaint	Rs. 75 for LT Rs. 150 for HT
2.	1.2	Overhead Line/overhead Cable breakdowns	Rs. 75 for LT Rs. 150 for HT
3.	1.3	Underground cable break down	Rs. 75 for LT Rs. 150 for HT
4.	1.4	Distribution and/or Power Transformer Failure	Rs. 150 for LT Rs. 450 for HT
5.	1.5	Scheduled outage i. Default in 24 hours notice ii. Exceeding 7 hours duration	Rs. 75
2. Quality of supply			
6.	2.1	Voltage variations	Rs. 150 for LT Rs. 450 for HT
7.	2.2	i. Supply interruption ii. Supply outage duration	Rs. 5 Per interruption exceeding the benchmark Rs. 5 Per hour or part thereof exceeding the benchmark
8.	2.3	i. SAIFI ii. SAIDI	A separate system development fund shall be maintained by the Nigam in which Rs. 0.5 Crore for SAIFI and Rs. 0.5 Crore for SAIDI, quarterly shall be deposited towards each default in the benchmark

			of SAIFI and SAIDI . The fund shall be utilized with the prior approval of Regulatory Commission.
9.	2.4 Compensation for damages on account of heavy fluctuations in supply or short circuiting of lines	Fan, B&W TV, Mixy	Rs1000
		Colour TV, Semi-Automatic Washing Machine, Fridge	Rs2000
		Fully Automatic Washing Machine, Computer, Air Conditioner	Rs4000
Note: - Compensation for damages on account of heavy fluctuations in supply or short circuiting of lines shall be payable to individuals when event affects more than five consumers on a feeder and subject to physical verification of the damaged equipments by theNigam.			
3. Meter Complaints			
10.	3.1	Testing of meter	Rs. 200 for LT Rs. 500 for HT Rs. 1000 for EHT
11.	3.2	Replacement of stopped / defective/ burnt Meter	As per RERC (Electricity Supply Code & Connected Matters) Regulations 2021
12.	3.2	For no-current complaint due to meter	Rs. 200 for LT Rs. 500 for HT Rs. 1000 forEHT
4. Shifting of Meter / Service line			
13.	4.1	Demand note	Rs. 75 for LT Rs. 150 for HT Rs. 300 for EHT
14.	4.2	Shifting of Meter	Rs. 75 for LT Rs. 150 for HT Rs. 300 for EHT
15.	4.3	Shifting of Service line	Rs. 75 for LT Rs. 150 for HT
5. Release of new connection/additional power			
16.	5	Release of new connection/additional power	Rs. 300 for LT Rs. 750 for HT Rs. 1500 for EHT

6. Transfer of ownership or change of category			
17.	6	Transfer of ownership or change of category	Rs. 75 for LT Rs. 150 for HT Rs. 300 for EHT
7. Consumer bill complaint			
18.	7	Billing complaint resolution	Rs. 75 for LT Rs. 150 for HT Rs. 300 for EHT
8. Disconnection of supply			
19.	8.1	Disconnection of supply	Rs. 75 for LT Rs. 150 for HT Rs. 300 for EHT
20.	8.2	Issue of no dues certificate	Rs. 500 for LT Rs. 1000 for HT Rs. 2000 for EHT
9. Restoration of a disconnected consumer			
21.	9	Restoration of a disconnected consumer	Rs. 500 for LT Rs. 1000 for HT Rs. 2000 for EHT
10. Delivery of bills			
22.	10	Delivery of bills	Rs. 25 for LT Rs. 50 for HT Rs. 75 for EHT

Note: -The above mentioned amount of compensation shall remain the same if time taken by Nigam is up to double the specified period; there after the amount of compensation shall be double the amount specified above.

Overall minimum Standards of Performance for Nigam:-

S. No.	Activity as mentioned in Schedule-II	Minimum overall quarterly standards of performance
1.	No current complaints	95%
2.	Other activities	90%
3.	SAIFI	To be achieved as per Schedule-I
4.	SAIDI	To be achieved as per Schedule-I

Distribution SOP Reporting Formats

Establishment of Help desk

SOP-1

Name of Licensee/franchisee:

S. No.	Name of Circle/ franchisee area	Total no. of help desk to be established	No. of help desk previously established	No. of help desk established during the period	Total no. of help desk established (4+5)	help desk yet to be established (3-6)	No. of consumers connected with help desk	Total no. of consumers in the area
1	2	3	4	5	6	7	8	9
1								
2								
3								
4								
5								
6								
7								
8								
	Total							

Signatures with Designation)

Distribution SOP Reporting Formats

Consumer Complaints and system reliability parameters

SOP-2
A

Name of Licensee/franchisee:

A. Individual consumer grievance

S. No.	Ref no. of Sch.-1	SOP Parameters	Complaints brought forward	Received during period	Total complaints (4+5)	No. of complaints Redressed in time (out of 6)	% of complaints Redressal in time (7/6*100)	No. of complaints Redressed beyond time (out of 6)	Total complaints redressed (7+9)	Complaints pending (6-10)	Minimum overall performance target as per schedule -III	Whether overall standards achieved (yes/no)
1	2	3	4	5	6	7	8	9	10	11	12	13
1	1.1	No current complaint										
2	1.2	Overhead Line / overhead Cable breakdowns										
3	1.3	Underground cable breakdown										
4	1.4	Distribution and/or power Transformer Failure										
5	1.5	Scheduled outage Default in 24 hours notice										
6	1.5	Scheduled outage Exceeding 7 hours duration										

7	2.1	Voltage variation										
8	3.1	Testing of Meter										
9	3.2	Replacement of stopped/defective/burned Meter										
10	3.2	No-current complaint due to meter										
11	4.1	Demand note										
12	4.2	Shifting of Meter										
13	4.3	Shifting of Service line										
14	5	Release of new connection/additional power										
15	6	Transfer of ownership or change of category										
16	7	Billing complaint resolution										
17	8.1	Disconnection of supply										
18	8.2	Issue of no dues certificate										
19	9	Restoration of DC consumers										
20	10	Timely delivery of bills										
		Total										

B. Feeder details**i. For industrial feeders**

S. No.	Ref no. of Sch.-I	SOP Parameter	Total No. of industrial feeders	No. of feeders out of Column 4 having sustained interruptions more than the benchmark as per schedule-I	No. of feeders out of Column 4 having sustained interruptions less than the benchmark as per schedule-I (4-5)	% of feeders not exceeding the benchmark (6/4*100)	No. of 11 kV feeders out of Column 4 exceeding the outage duration as per schedule-I	No. of feeders out of Column no. 4 having outage duration less than the benchmark as per schedule-I (4-8)	% of feeders not exceeding the outage duration benchmark (9/4*100)	Minimum performance level as per schedule-III for Colum no. 7 & 10 shall be minimum 90% and above	Whether overall standards achieved (yes/no)	
											In respect of sustained interruption (yes/no)	In respect of sustained interruption duration (yes/no)
1	2	3	4	5	6	7	8	9	10	11	12	13
1												
2												
3												
	Total											

ii. For Urbanfeeders

S. N o.	Ref no. of Sch.-1	SOP Parameter	Total No. of Urban feeders	No. of feeders out of Column 4 having sustained interruptions more than the benchmark as per schedule-I	No. of feeders out of Column 4 having sustained interruptions less than the benchmark as per schedule-I (4-5)	% of feeders not exceeding the benchmark (6/4*100)	No. of 11 kV feeders out of 4 exceeding the outage duration as per schedule-I	No. of feeders out of Column 4 having outage duration less than the benchmark as per schedule-I (4-8)	% of feeders not exceeding the outage duration benchmark (9/4*100)	Minimum performance level as per schedule-III for Column no. 7 & 10 shall be minimum 90% and above	Whether overall standards achieved (yes/no)	
											In respect of sustained interruption (yes/no)	In respect of sustained interruption duration (yes/no)
1	2	3	4	5	6	7	8	9	10	11	12	13
1												
2												
3												
	Total											

iii. For Rural feeders

S. N o.	Ref no. of Sch.-1	SOP Parameter	Total No. of Rural feeders	No. of feeders out of Column 4 having sustained interruptions more than the benchmark as per schedule-I	No. of feeders out of Column 4 having sustained interruptions less than the benchmark as per schedule-I (4-5)	% of feeders not exceeding the benchmark (6/4*100)	No. of 11 kV feeders out of 4 exceeding the outage duration as per schedule-I	No. of feeders out of Column 4 having outage duration less than the benchmark as per schedule-I (4-8)	% of feeders not exceeding the outage duration benchmark (9/4*100)	Minimum performance level as per schedule-III for Column no. 7 & 10 shall be minimum 90% and above	Whether overall standards achieved (yes/no)	
											In respect of sustained interruption (yes/no)	In respect of sustained interruption duration (yes/no)
1	2	3	4	5	6	7	8	9	10	11	12	13
1												
2												
3												
	Total											

C. SAIFI andSAIDI

S. No.	Name of the Circle/franchisee area	No. 11 kV feeder	Total no. of consumers	Calculated SAIFI as per formula given in schedule-I	Calculated SAIDI as per formula given in schedule-I	Whether SAIFI benchmark achieved (yes/no)	Whether SAIDI benchmark achieved (yes/no)
1	2	3	4	5	6	7	8
1							
2							
3							
	Total Discom/franchisee area						

Distribution SOP Reporting Formats

Details of Compensation Paid

SOP-3

Name of Licensee/franchisee:

For the 1st/2nd/3rd/4th quarter ending:

S. No.	Name of circle/franchisee area	Number of consumers in the circle/franchisee area	Compensation lodged		Compensation paid		Automatic compensation	
			No. of consumers	Amount (Rs.)	No. of consumers	Amount (Rs.)	No. of consumers	Amount (Rs.)
1	2	3	4	5	6	7	8	9
1								
2								
3								
4								
5								
6								
7								
8								
	Total							

Distribution SOP Reporting Formats

Details of system development fund as per Schedule-II

SOP-4

Name of Licensee/franchisee:

For the 1st/2nd/3rd/ 4th quarter ending:

S. No.	Amount of fund available up to the previous period (Rs.)	Amount of fund deposited in the current quarter (Rs.)	Total fund available (Rs.)	Fund utilized as per regulatory approval (Rs.)	Balance lying unutilized (Rs.)
1	2	3	4	5	6
1					
2					
3					
4					
	Total				

(Signatures with Designation)

Annexure –I**Name of Complaint Centre/helpdesk:****Name of circle/division/sub-division:****Month**

S. No.	Time and date of receiving complaint	Mode of receiving complaint	Name, address, mobile no. of complainant	A/c no.	K. No.	Nature of complaint	Complaint registration number	Reference guaranteed standards	Time and date of redressal of complaint	Total time taken for complaint redressal (in days/hrs)	Redressal of grievance within std time. (yes/no)	whether automatic compensation is paid where required to be given as per regulation 8.1	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1													
2													
3													

Compensation claim format for the consumers

- 1 Name of the consumer
- 2 Account number
- 3 K. No.
- 4 Mobile number
- 5 Nature of grievance
- 6 Time and date of registration with the licensee/franchisee
- 7 The complaint registration number conveyed by the licensee / franchisee
- 8 Time and date of complaint redressal
- 9 Delay as per prescribed benchmark as per schedule-I
- 10 Compensation formula as per schedule-II (Rs.)
- 11 Amount of compensation claimed

Note: - The software module shall have provision to assign registration to each such compensation application.

[---END OF SOP (2.12)---]

2.13 SYSTEM SUPPORT WITH TICKETING

- i. The Web based system should have online context sensitive help, user manuals and centralized ticketing system for Support.
- ii. The application users shall have provision to raise tickets, a unique ticket number shall be assigned.
- iii. The web-based application shall have tools to track the ticket number for status update and resolution.
- iv. The web-based application shall have configurable escalation matrix inbuilt for escalation of support issues.
- v. The web-based application shall have dashboards and MIS on the ticket status and resolution.

2.14 SPECIAL FEATURES & CONDITIONS

2.14.1 Data exchange with other systems

The proposed solution shall be capable to exchange the database information with existing RAPDRP software, upcoming new ERP system, Application Modules being developed under E-Power (NIC) project by Discom or any other Software Modules on continues basis so as to enable Discom to have a common MIS. MIS data has to be updated within 6 Hrs of completion of day i.e. post mid night and before 6 A.M.

The Software shall have interfaces to integrate with online payment gateways, third party payment systems like e-mitra and energy audit system. The system shall be built SOA, using standard set of technical specifications of web services and can be integrated with any system. Middleware in the form of Hardware, Software or firmware and connectivity thereof, if required, shall be deployed by Agency as part of scope of work to integrate with the existing and upcoming new system in full- fledged data sharing and as touch points.

- 2.14.2 **SMS and E-mail Alerts:** The web-based application shall have in built features for sending SMS and email alerts to users based on the requirement of the DISCOM. The required SMS gateways shall be provided by DISCOM; however, email gateway shall be provided by bidder. DISCOM desires to send alerts on various events to consumers like meter reading, bill generation, due date, payment reminder, payment collection, disconnection, supply / shutdown alerts etc.

- 2.14.3 The application shall be accessed over secure internet with 128 Bit Encryption. Latest encryption technology shall be used for securing the data transmission and access by multiple users.

- 2.14.4 The data architecture, Table Structure, Triggers, Stored Procedures, and Scripts used should be handed over to DISCOM at the time of project closure. DISCOM shall be the absolute owner of the data. The administrator rights with the password shall be handed over to DISCOM. The Web based software should be accessible over the internet (broadband) and shall be designed to work on low band width. The software shall have minimum possible response times for data access, report generation and data queries as per industry standards and approved by DISCOM. The software shall be scalable and there should not be any restriction on the number of users/consumers with compromising the response time. All the Licenses shall be in the name of Jodhpur Discom.
- 2.14.5 The system shall be sustainable and certain tests shall be carried out from initial stage to final acceptance stage. Further regression test shall be carried out whenever there is change in tariff or business logic.
- 2.14.6 Two factor authentication system shall be implemented i.e. both password and biometric. The supply & maintenance of required biometric devices at the all the levels shall be in the scope of bidder. For critical transactions OTP based approval system in addition to the above shall be implemented. All transactions shall be logged and have two stage authentication i.e. marker and approver.
- 2.14.7 System should be capable to generate consumer Pass Book indicating Bill issued, payment made, and Security Deposit. This Pass Book shall be available for entire year indicating all transactions made during the year by the consumer.
- 2.14.8 As the system has been provisioned with BI & report builder Tool, there shall be no limitations. The system has been designed in such a way that on the basis of input received per billing / or other system. This system can be utilized to deliver different reports.
- 2.14.9 The system's shall have provision to handle start-to-end all aspects of the customer life cycle i.e. from the service connection, meter reading, and field work to rating, billing, payments processing, and collections and delivery of comprehensive contact centre capabilities, customer relationship management etc. The system is intended to usher in transparency and customer delight. The system shall have to be secure, flexible, scalable, and adaptable for future requirements of Discom. It should ensure billing accuracy, quickly comply with new regulatory mandates, track payments, credit and collections activities easily, minimizing write-offs, offer extensive and user-friendly customer services and help the Discom with rich analytics to stop leakages and bring down techno-commercial losses rapidly.

- 2.14.10 Training to be imparted to the designated DISCOM personnel of the system and its operation. Onsite Training has to be imparted to at least Two Ledger Keeper, One ARO and three JENs, One AEN at each Sub Division.
- 2.14.11 Printing of Ledgers, DC Notices, Enhance Security Notices, Annual Ledger for sub-division, Consumer Annual Ledger, Outstanding List, PDC List, Weekly reports, Monthly reports and Quarterly reports, MIS reports and delivering to the respective Accounts Officer.
- 2.14.12 Any other incidental service that is required for achieving the objectives as per the tender specifications.
- 2.14.13 Integration: The system to be deployed under this contract shall be SOA (Service Oriented Architect) based and shall be considered as master of Feeder Monitoring System, Mobile Application and accordingly shall be integrated with the same and also with RAPDRP system (if required) and forthcoming future system (during currency of Contract) for which necessary catalogue services of RAPDRP system shall be provided by Discom. All the middleware in the form of Hardware, software & firmware required for such integration shall be deployed by agency as part of scope of Work with no additional cost to Discom.
- 2.14.14 The requisite Middleware has to be deployed by bidder and it should be interoperable with RDBMS and other sub components.
- 2.14.15 A comprehensive list of generic functionalities required in the Billing Software has been specified in the document. However, the Agency has to take into consideration the various central and stage government IT initiative that are being carried out or intended to be carried out and develop the additional modules or features as and when inputs/requirements are provided during the contract period. Agency shall do the detailed requirement gathering to figure out the exact requirement in accordance with the above recommendations. No additional payment or charges shall be claimed either for grounds up development or for change management requested.
- 2.14.16 Networking configuration of connectivity with any new vendor.
- 2.14.17 Integration of New Connection Service of SWSC portal under EoDB, e-Mitra Platform under RGDPs act-2011, UWP portal for roof top solar system, Lifter Mobile Application with CCC
- 2.14.18 Billing of high value consumers having contract demand CD =>125kVA at Central Level of Commercial wing
- 2.14.19 Any other business process change requirement based on Discom need and customization of any software modules shall be carried out by the bidder without any additional cost to the Discom.
- 2.14.20 Updation of Jan-Soochana portal services

2.14.21 Implementation of Tax Collection at Source (TCS), GST and any required changes in billing format

2.15 IT & OTHER INFRASTRUCTURE TO BE SUPPLIED

IT Infrastructure to be deployed at each level in the Discom area: for Total SDO (185) – Rural 109 & Urban 76

JODHPUR DISCOM-IT HARDWARE REQUIREMENT

SN	Item Description	Quantity at cost centre	11kV Feeder	Sub Div.	Division	Circle	Zone	Discom HQ + HT	SE(IT)	Total Quantity
No. of Cost Centre			11491	185	46	11	3	1	1	
1	Desktop PCs	per Cost Centre	0	3	1	3	3	12	5	693
		Spare be kept	0	0	0	3	0	0	0	
		Total	0	555	46	66	9	12	5	
2	Desktop PC with 80 Column Dot Matrix Printer or better for Cash Counter	per Cost Centre	0	1	0	0	0	0	0	207
		Spare be kept	0	0	0	2	0	0	0	
		Total	0	185	0	22	0	0	0	
3	UPS (1x 2KVA– 4hrs backup)	per Cost Centre	0	1	0	0	0	1	0	186
		Spare be kept	0	0	0	0	0	0	0	
		Total	0	185	0	0	0	1	0	
4	UPS (1x 1KVA– 2hrs backup)	per Cost Centre	0	0	1	1	1	0	0	60
		Spare be kept	0	0	0	0	0	0	0	
		Total	0	0	46	11	3	0	0	
5	Network Laser printer	per Cost Centre	0	1	0	0	0	0	0	196
		Spare be kept	0	0	0	1	0	0	0	
		Total	0	185	0	11	0	0	0	
6	Laser printer	per Cost Centre	0	0	1	1	1	1	1	62
		Spare be kept	0	0	0	0	0	0	0	
		Total	0	0	46	11	3	1	1	

7	Android based Smart Mobile phone with communication cable for meter reading	per Cost Centre	0	30 (R)	0	0	0	0	0	4433
				8 (U)	0	0	0	0	0	
		Spare be kept	0	3	0	0	0	0	0	
		Total	0	4433	0	0	0	0	0	
8	Bluetooth Mobile printer	per Cost Centre	0	30 (R)	0	0	0	0	0	4433
				8 (U)	0	0	0	0	0	
		Spare be kept	0	3	0	0	0	0	0	
		Total	0	4433	0	0	0	0	0	
9	Power Bank, Accessories etc	per Cost Centre	0	30 (R)	0	0	0	0	0	4433
				8 (U)	0	0	0	0	0	
		Spare be kept	0	3	0	0	0	0	0	
		Total	0	4433	0	0	0	0	0	
10	GPRS (4G or better) SIMs with necessary Data Packs	per Cost Centre	0	30 (R)	0	0	0	0	0	4433
				8 (U)	0	0	0	0	0	
		Spare be kept	0	3	0	0	0	0	0	
		Total	0	4433	0	0	0	0	0	
11	QR Code Reader & scanner	per Cost Centre	0	1	0	0	0	0	0	196
		Spare be kept	0	0	0	1	0	0	0	
		Total	0	185	0	11	0	0	0	
12	Biometric Reader (to be used with desktop PCs for login purpose)	per Cost Centre	0	3	0	0	0	0	0	610
		Spare be kept	0	0	0	5	0	0	0	
		Total	0	555	0	55	0	0	0	

*****Note:**

- a) In case if any new Feeder, Sub-Division, Division, Circle, Zone are created during the tenure of the contract, requisite hardware as above shall be provided by Agency as per the rates decided in workorder.
- b)** If any of the IT infrastructure mentioned above becomes defective and non repairable during entire contract period, the same shall be replaced by the agency with same or higher specification without any extra cost to Purchaser.
- c) All the above items shall be BRAND NEW and refurbished material shall not be allowed at the initial commencement of the work order.
- d) The vendor shall have back-to-back arrangement with respective OEM vendor for Technical support, Annual Maintenance / warranty etc. for entire contract period for which necessary certificate / authorization form shall be enclosed with the bid.
- e) The Valid GST invoices / attested copies in respect of purchase of all hardware items mentioned above shall be furnished by the successful bidder within stipulated time as and when required by the Nigam.
- f) All Smart Devices with Accessories shall be handed over to AEN / ARO of the Sub-Division and in case of loss, theft, damage by Meter Reader / Feeder in-charge / AEn / JEn, charges against loss, theft, damage shall be paid to the vendor on the rates as per valid invoices of the hardware items supplied to JODHPUR DISCOM and submitted by the bidder. The lost, damaged hardware item shall be supplied as replacement by Agency within 7-working days from the date of receipt of payment from DISCOM.
- g) All the hardware items shall be delivered to the respective office mentioned above and DISCOM shall takeover all the hardware and shall safeguard under its responsibility. In case of damage, loss, theft of the hardware after handing over to DISCOM offices, the bidder shall not be responsible.
- h) All above hardware items shall be offered by the agency for pre-delivery inspection before supply to JODHPUR DISCOM and putting into service.

2.15.1 **Guaranteed Technical Specification of the IT Infrastructure.**

2.15.1.1 **Android based Smart Phone and Mobile printer.**

No	Description	Specification
1.	Processor	Minimum 1.5 GHz Quad Core
2.	Display	Minimum 5" display with 1480 x 720 resolution and 16M colour depth.
3.	RAM	Minimum 4 GB
4.	ROM	Minimum 64 GB and External Memory Support MicroSD (Up to 512GB)
5.	Camera	Rear: Minimum 8 MP, Front: 5 MP. With Rear Camera having Auto focus & Flash.
6.	Network	4G FDD/4G TDD
7.	Connectivity	Micro USB, WIFI 802.11 b/g/n 2.4 Ghz, Bluetooth v5.0
8.	Location	GPS, Glonass
9.	Operating System	Android.
10.	Battery	Minimum 3000 mAh
11.	Make & Model	The Smartphone supplied shall be latest model and shall be from reputed brands i.e., Samsung / Lenova / Motorola / Panasonic / Nokia / LG / Asus / Micromax or reputed make.
12.	Mobile Printer	The printer shall support wired/wireless connectivity and shall have provision to print on 3" thermal stationery. Shall have black mark detection facility to detect the start and end of the bill. Shall have battery backup for printing about 200 bills per day.
13	Power Bank	10000 mAh Power bank for charging Mobile.

2.15.1.2 **Minimum specification of Desktop PC.**

No	Description	Specification
1.	Processor	Core i5 10th Generation
2.	Monitor	Above 19 inches LED
3.	RAM	8 GB
4.	HDD	1 TB 7200rpm Hard Disk Drive
5.	I/O Ports	External USB: 4 x 3.1 Gen 1 (2 front, 2 rear) and 4 x 2.0 (2 front, 2 rear - 2 SmartPower On)
6.	Networking	Integrated Realtek RTL8111HSD-CG Ethernet LAN 10/100/1000

7.	Operating System	Windows 10
8.	Make	Dell/ HP/ Lenovo
9.	Anti-virus	Licenses Antivirus for entire contract period

2.15.1.3 Minimum specification of Dot-Matrix Printer

Item	Required Parameter
Print Method	Impact dot matrix
Speed	340 CPS or higher
No. of Pins	24 Pin, Letter Quality
Printable Columns	80 or higher
Paper Handling (Paper Path)	Tractor / Manual Insertion (Rear in, Top out)
Interface Standard	Bi-directional parallel interface, USB 2.0 Full-Speed / Serial

2.15.1.4 Minimum specification of Online UPS 1 & 2 kVA2 Hours Backup.

Power Conditioning, Automatic self-test, Transformer-block spaced outlets., Microprocessor based
Input voltage: 160-280V, output Voltage: 230V+/-5%, Frequency: 50 Hz +/- 5%, Transfer time: 2-8 milisecs
Cold start facility, 120min. backup on computer load, Alarm on battery mode, overload and low battery,
Maintenance-free sealed Lead-Acid battery SMF 12V of EXIDE, AMARON, QUANTA or equivalent make.
AVR for regulated output, software shutdown , surge protection, EMI/RFI filter, cold start, over load and short circuit protection.

Note: Replace batteries, if battery backup is less than 30 minutes without any extra cost to Discom.

2.15.1.5 Standard **QR Code Reader & Scanner** shall be provided as envisaged in the scope of work. The data sheet/ Technical Specifications of the QR Reader & scanner shall be specified in the technical bid and shall be get approved by the successful bidder before offer.

2.16 MANPOWER TO BE DEPLOYED: MANPOWER

2.16.1 The following minimum number of resources would be provided by the agency:

Location	Designation	Quantity /Nos
DisCom HQ	Project Manager	1
	System Administrator	1
	Help desk and support operators	5 nos. for RMS
Circle level	Circle Manager	11
	IT Support personnel	22
Division	IT Support personnel	46
Sub-division level	IT Support personnel	185

Note:

- 1. Skilled / Highly Skilled man power shall be deployed and copy of documents of above personnel deployed at Billing Control Centre & Discom HQ shall be submitted to O/o SE (IT) and personnel deployed at Circle, Division and Sub-Division to the O/o Circle AO.**
- 2. OPTIONAL: Extra manpower, if required for associated field & office works/activities, meter reading etc. related to all the software modules (Rate to be quoted per skilled manpower per month (shall not be part of evaluation, Quantity of manpower may vary as per need and rate quoted shall not be less than the rates prescribed in governing labour laws at the time of bid) for Jodhpur Discom**

2.16.2 As such the agency shall not frequently change the office in charge/nodal officer, frequently. The Agency shall furnish documents regarding the experience of the key personnel proposed to be employed by him.

2.16.3 The experience for such personnel shall not be less than the following, for which the Agency shall furnish the details of the employees to be deployed after awarding of contract:

- a) Project Manager: The candidate must be Degree in Engineering / M.C.A / MBA with at least 5 years of experience to handle such works. Or any Degree with minimum 10 years of experience in the Jodhpur Discom Billing /CIS /CRM projects.
- b) System Administrator: The candidate must be Degree in Engineering / M.C.A / MBA with at least 5 years of experience of handling live production applications.
- c) Circle Manager: The candidate must be Diploma / Degree in Engineering/M.C.A / MBA with at least 3 years of experience to handle such works.
- d) IT personnel at Sub Division, Division and Circle Level: The candidate must be minimum Graduate / Post Graduation with at least 3 yrs. of experience and trained to handle all the 19 nos. Software modules and mobile App as envisaged in this RfP and processes of printing etc. The persons so deployed

in sub-division should have complete knowledge on both hardware & application. Likewise the persons so deployed in Division & circle level shall be well versed with Android based Smart Mobile phone with communication cable for meter reading, Bluetooth Mobile printer, Power Bank, Accessories etc., GPRS (4G or better) SIMs with necessary Data Packs for immediate repair of the same.

- e) Help Desk and Support Operator: These persons must have graduate and have diploma in Computers, have one year experience to handle such works.

2.16.4 **Discom has right to verify the above at any time.**

2.17 DETAILS OF THE SUB DIVISIONS, DIVISIONS, CIRCLES, ZONAL OFFICES IN DISCOM:

Particulars	Jodhpur Discom
Circle	11+1#
Zonal Office	3
Division	46
Total Sub Divisions	185
Total no. of Feeder	11491

Bikaner City area is being operated by Input Based Distribution franchisee.

TO SUPPLY STATIONERY & CONSUMABLES:

- 2.17.1 The required stationery and consumables for Spot Billing Devices for bill generation.
- 2.17.2 The required stationery and consumables at Sub Division for printing bills (LT & HT), payment receipts at cash counters, MIS reports generation.
- 2.17.3 The required stationery and consumables at Circle level for printing of Ledgers, DC Notices, Lock Notices, DC Orders, PF Notices, Security Notices, Amnesty Notices ,EUDR Notices, Outstanding List, PDC List, Weekly reports, Monthly reports and Quarterly reports, Yearly and any other report as per specification and MIS reports
- 2.17.4 Replacement of all consumables including cartridge of Laser Printer, Ribbons for Dot Matrix **printer, battery of UPS, battery of Mobile devices.**

2.18 MINIMUM SPECIFICATION FOR STATIONERY

PRE-PRINTED THERMAL PAPER FOR SPOT BILLING			
Smoothness	Min 550		
Brightness %	Min 75		
Tensile Strength KN/m	MD 2.0	CD 1.0	
Tearing Strength mN	MD 200	CD 200	
Heat Resistance	Max 0.2	Min 1.0	
Moisture resistance	Max 0.2	Min 1.0	
Light Resistance	Max 0.2	Min 1.0	
Dynamics Colour response	0.32mj / dot. Min 1.10		
Static Colour Response (70 deg C)	Max 0.2		
Length: 12 Inches; Width: 76 to 78 mm; GSM: 80 GSM; Multi-colour: 5 Colours			

SECTION 3

3. Pre-Qualification Requirements (PQR)

The Bidder must possess following credentials prescribed as Pre-Qualification Criteria.

Note:

1. *In case of non-furnishing the requisite documents along with the bid, JDVVNL may consider the bid as non-responsive and bid may likely be rejected.*
2. *Irrespective of meeting the above qualification requirements, none of the consulting companies engaged by DISCOM for IT projects as on the date of publishing of this tender can bid for this tender.*
3. *Work Orders on JV/ Consortium/ Sub- contracting experience shall not be considered in the qualification and for securing marks.*

Sr. No.	Criteria	Supporting Documents Required
A. For Companies / Partnership Firms		
1	Bids can be submitted by a Company incorporated under applicable Companies Act / Proprietary Firm / Partnership Firm incorporated under applicable Partnership Act and fulfilling the criteria mentioned in the subsequent points.	Self-Declaration along with the following: <ul style="list-style-type: none"> • Copy of Self-Attested Incorporation Certificate in case of Company. • Copy of Self-Attested Partnership Deed • Copy of Self-attested latest Income Tax Return
2	The Bidders shall have following - <ol style="list-style-type: none"> 1. Minimum CMMI level 3 2. ISO 9001:2015, 3. ISO 27001:2013 or latest revision 	Documents to be uploaded: <ul style="list-style-type: none"> • Valid CMMI certificate (Link of SEI should also be mentioned in response) • Valid ISO certificate
3	The Bidder shall have experience of implementation of Web based Revenue Management System (RMS) in at least 2 Power Distribution utilities anywhere in India during last five (5) years as on date of bid submission. Each project should have minimum 20 lakhs consumers and have been operational for at least 24 months.one project out of above should have atleast 45 Lac consumers	Documents to be uploaded: <ul style="list-style-type: none"> • Work orders issued in the name of the bidder by various Power Distribution utilities. • Performance / Work Completion Certificates (issued by not below the order giving authority) of respective Distribution utilities for the orders issued.

4	<p>The Bidder shall have experience of implementation of one (1) RMS Project having minimum 45 lakhs consumers and project should be operational for last 24 months as on date of bidding. Above referenced project should have following modules/ functionalities as per RfP.</p> <ol style="list-style-type: none"> 1) New Connection Management 2) Disconnection & Reconnection Management 3) Metering 4) Billing with Spot Billing 5) Collection 6) Consumer Web Self Services 7) Mobile App for Consumers & Officers 8) Energy Audit 9) MIS Reports with Dashboards 	<p>Documents to be uploaded:</p> <ul style="list-style-type: none"> • Work orders issued in the name of the bidder by Power Distribution utilities. • Performance / Work Completion Certificates (issued by not below the order giving authority) of respective Distribution utilities for the orders issued.
5	<p>The bidder should have done integration of proposed RMS with following:</p> <ol style="list-style-type: none"> 1. ERP 2. MDAS/ AMR System 3. State Level E-Governance System / State Level Single Window Clearance System 4. Meter Data Management System for Smart Meters 5. Customer Care Centre / Call Centre 	<ul style="list-style-type: none"> • Relevant Work Order's. • Performance certificates.
6	<p>The Bidder should have average annual turnover of Rs. 70 Cr. in last three Financial Years (2017-18, 2018-19, 2019-20).</p>	<p>Documents to be Uploaded:</p> <p>Copy of the audited statement of accounts (P&L Account & Balance Sheet) duly certified by the Chartered Accountant along with certificate stating the Turnover, Profit, Net Worth shall be submitted as a proof. Mentioning UDIN number shall</p>
7	<p>The Bidder should be profit making in the last 3 financial years (2017-18, 2018-19, 2019-20).</p>	

10	The Bidder should have positive net worth as on 31st March 2020.	be uploaded. Note: Net worth means the sum total of the paid up capital and free reserves (excluding reserves created out of revaluation) reduced by aggregate value of accumulated losses (including debit balance in profit and loss account for current year) and intangible assets.
11	The Bidder should be qualified, not be insolvent, not be in receivership, not be bankrupt or being wound up, should not have affairs administered by a court or a judicial officer, should not have business activities suspended, should not be blacklisted or debarred by any utility/ government agency during last 5 years, should not have a conflict of interest.	Self-Declaration for Not Blacklisting on Non-Judicial stamp paper of appropriate value, duly notarized. Note: The bidder shall declare on Non Judicial stamp of appropriate value that the information furnished by him is true and correct. If the Discom found that any misleading information and /or suppressing of the facts by the bidder, Discom shall reject the bid and such bidder will be black listed including initiation of criminal proceeding. The decision of the Discom shall be final in this regard.
12	The bidder shall propose RMS application conforming to 100% compliance to technical & functional requirement and Implementation within the stipulated period as defined in this RFP.	Declaration to be submitted on ₹ 100 NJSP and should be duly notarized.

B. For Power Distribution Utilities		
B	The Power Distribution Utilities irrespective of above QR may also bid subject to fulfilling the following requirements:	
B.1	Should have Distribution license for Electricity Distribution from the respective Regulator. Billing in their area of operation is being carried out through own billing software or COTS (Commercially off the Shelf) platform (SAP/ ORACLE, etc.). The Proposed Revenue Management System is being used for at least 15 Lakhs live consumer base in its area of	<ul style="list-style-type: none"> Undertaking to be submitted that the core billing module used under this bid shall be COTS (SAP/ ORACLE, etc.) or in house software Self-declaration regarding the system being used for at least 15 Lakhs consumers in its area of operation cumulatively during last 3 financial years. Valid Distribution License for

	<p>operation in any single area of distribution, for a continuous period of 24 months during last 3 financial years i.e. FY2017-18, 2018-19, 2019-20.</p> <p>Undertaking to be submitted that the core billing module used under this bid shall be COTS (SAP/ ORACLE, etc.) or in-house software.</p> <p>Self-declaration from the company head that the system being proposed is the same system for which the experience is claimed.</p>	<p>Electricity Distribution from the respective Electricity Regulatory Commission is required to be uploaded.</p> <p>Note: All above undertakings shall be signed by the officer not below the rank of Superintending Engineer.</p>
B.2	<p>The bidder must have been assessed and possess a valid CMMI Level 3 or above and shall have ISO 9001:2015 latest version valid as on the date of tender and the same shall be maintained valid till finalization of the tender / contract.</p>	<p>Documents to be uploaded: CMMI Certificate issued by CMMI institute. Valid ISO 9001:2015 latest version certificate.</p>

- **Note: Revenue Management System: The RMS System is defined as an independent comprehensive suite of application that contains core modules of New Connection Management, Billing, Collection, Metering, Energy Audit, MIS/DCB & Reports, Consumer web self-services where the consumer master data is maintained.**

Format of Affidavit for micro, small and medium enterprise

{On Non-Judicial Stamp Paper of Rs. 100/- attested by Notary Public/ First Class Magistrate}

IS/oAgeYrs. Residing at
..... Proprietor/Partner/ Director of M/s
..... ("Enterprise") do hereby solemnly affirm and declare that:

(a) My/Our above noted Enterprise M/s has been issued acknowledgement of Entrepreneurial Memorandum Part - II by the District Industries Centre The acknowledgement No. is dated and has been issued for manufacture of following items:

S.no.	Name of Item	Production Capacity (Yearly)
1		
2		
3		

(b) My/Our above noted acknowledgement of Entrepreneurial Memorandum Part - II has not been cancelled or withdrawn by the Industries Department and that the Enterprise is regularly manufacturing the above items.

(c) My/Our Enterprise is having all the requisite plant and machinery and is fully equipped to manufacture the above noted items.

The present status of the firm is as per acknowledgment of Entrepreneurial Memorandum Part-II issued on the date of District Industries Centre.

Place

Signature of Proprietor/ Director/
Authorized Signatory with Stamp and
Date

VERIFICATION

I, _____ S/o _____ Aged____ Years residing at _____
_____ Proprietor/ Partner/ Director of Enterprise
M/s _____ verify and confirm that the contents at (a), (b), (c) & (d) above are true and correct to the best of my knowledge and nothing has been concealed therein. So, help me God.

DEPONENT

Section 4

4. INSTRUCTION TO BIDDERS

4.1. GENERAL INSTRUCTIONS

- 4.1.1. Tendering authority will receive bids in respect of services as set forth in the accompanying Tender document.
- 4.1.2. All bids shall be prepared and submitted in accordance with terms and conditions of this Tender Document.
- 4.1.3. The Bidder, in his own interest is requested to read very carefully these instructions and the terms and conditions as incorporated in General Conditions of Contract and Technical specification before filling and submitting the Bids.
- 4.1.4. If the bidder has any doubt as to the meaning of any provisions or any portion thereof, he shall before submitting the Bid, may refer the same to the Tendering Authority in writing, well in time before the specified date of opening of Bids so that such doubts may be clarified.
- 4.1.5. Submission of the Bid shall be deemed to be the conclusive proof of the fact that the Bidder has acquainted himself and is in agreement with all the instructions, terms and conditions governing this Tender document unless otherwise specifically indicated/ commented by him in his Bid.
- 4.1.6. Bids submitted after the time and date fixed for receipt of bids as set out in the invitation to Bid shall be rejected and returned to the bidders.
- 4.1.7. The works referred herein shall cover the entire scope of the proposal which include commissioning and erection of equipment including the successful completion of performance and guarantee tests which the Discom desires to get executed.

4.2. FIELD CONDITIONS

- 4.2.1. The geographical condition of the JODHPUR DISCOM is not same and have different terrain. The details of the area covered is mentioned in the table at the Introduction Section.
- 4.2.2. The bidder may in its own interest, before submitting the bid, inspect and examine the area involved and satisfy it regarding the existing system.
- 4.2.3. For ascertaining the existing system, condition's etc., the agency may contact the Tendering Authority.
- 4.2.4. No claim from Bidder or Agency for change in the bid or terms & conditions of the contract shall be entertained on the ground that the conditions are different than what were contemplated by them at the time of submitting the bids.

4.3. SUCCESSFUL IMPLEMENTATION AND GOOD PERFORMANCE

- 4.3.1. Any work if specifically, not mentioned but reasonably implied for the successful implementation and good performance of the proposed work

is deemed to be included and has to be executed within the ordered price.

4.4. PREPARATION OF BIDDING DOCUMENT

4.4.1. The bidder has to submit Bid Security Declaration on Rajasthan Non-judicial Stamp Paper of Rs. 50/- (excluding surcharge on Stamp Paper, as per rules) against EMD/Bid Security according to Appendix A in favour of SE (IT), JDVVNL, Jodhpur as per Rajasthan Transparency in Public Procurement (Second Amendment) Rules, 2020 vide G.S.R.230 issued by FINANCE (G&T) DEPARTMENT NOTIFICATION Jaipur, December 18, 2020.

4.4.2. Tender Document Fee & Tender Processing Fee

The bidders are permitted to download the bid document from websites <https://www.eproc.rajasthan.gov.in>, www.energy.rajasthan.gov.in/JDVVNL but must pay the cost of Tender document as mentioned in NIT table within the stipulated date & time in the office of Sr. Accounts Officer (EA & Cash), JODHPUR DISCOM, Jodhpur and obtain acknowledgement thereof. The demand draft in favour of MD, RISL Jaipur shall be submitted to the SE (IT) and the same shall be sent to RISL by the SE (IT).

4.5. CLARIFICATIONS AND AMENDMENTS & DEVIATION FROM TENDER DOCUMENT

4.5.1. CLARIFICATIONS TO THE TENDER DOCUMENT

- a. Verbal clarifications and information given by the Discom or his employee(s) or his representative(s) shall not in any way be binding on the owner.
- b. The bidder is required to carefully examine the Terms & Conditions including specifications of this Tender document and fully inform himself as to all the terms and conditions which may in any way affect the Work or the cost involved thereof.

4.5.2. CLARIFICATIONS TO THE BID

- a. To assist in the examination, evaluation, comparison and post qualification of the bids, the Tendering Authority may, at its discretion, ask any bidder for a clarification of his bid. The Tendering Authority's request for clarification and the response shall be in writing or e-mail of the Authorized Signatory of the Bidder.
- b. Any clarification submitted by a bidder with regard to his bid that is not in response to a request by the Tendering Authority shall not be considered.
- c. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the tendering authority in the evaluation of the Bids.

4.5.3. AMENDMENT OF TENDER DOCUMENT

- a. At any time prior to the deadline for submission of the Bids, if the Tendering Authority deemed it necessary to amend the Tender document, it shall do so by issuing appropriate Corrigendum/Addendum.
- b. Any Corrigendum/Addendum issued shall be a part of the Tender document and shall be published on the website of JODHPUR DISCOM & state e-procurement portal.
- c. To give prospective Bidders reasonable time to take a Corrigendum/Addendum into account in preparing their Bids, the tendering authority may, at its discretion, extend the deadline for the submission of the Bids.
- d. Any change in date of submission and opening of bids would be published through Jodhpur Discom's website and state e-procurement portal.

4.5.4. DEVIATION FROM BID DOCUMENTS

- a. The bidder should comply all requirements set out in the bidding document and NO TECHNICAL and COMMERCIAL Deviation shall be entertained.
- b. The Bids with Deviation from the requirement laid down in this document shall be considered as Non-Responsive.
- c. The offer must have 'No Deviation' certificate as per bid document.

4.6. SUBMISSION AND OPENING OF BIDS

4.6.1. COST OF BIDDING:

The Bidder shall bear all the risks and costs associated with the preparation and submission of its Bid, and the Tendering Authority shall not be responsible or liable for those risks and costs, regardless of the conduct or outcome of the bidding process.

4.6.2. LANGUAGE OF BIDS:

The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Tendering Authority, shall be written only in English Language. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, such translation shall govern.

4.6.3. BIDS ARE TO BE SUBMITTED IN TWO PARTS

The Bid shall be submitted within the specified time on <https://www.eproc.rajasthan.gov.in> in electronic format in the following manner:

Part- A (Technical Bid): will contain

- a) Cover 1: Fees (to be uploaded in .pdf format)
 - (i) Copy of receipt of submission of Tender document fees
 - (ii) Copy of receipt of submission of Tender processing fee
 - (iii) Copy of receipt of submission of Bid Security Declaration on Rs. 50/- Rajasthan Non Judicial Stamp paper excluding surcharge on stamp paper.
- b) Cover 2: Techno-Commercial Bid (to be uploaded in .pdf format):
 - (i) Complete Technical Bid comprising information in specified formats and schedules (Except the price schedule) including details & design of the proposed system(s) to meet out the work requirement together with its capabilities.
 - (ii) Supporting documents to ascertain the eligibility / qualification as per the QR requirements of this tender
 - (iii) The Tendering Authority may require any bidder to furnish the documents in original or copy duly attested by Notary as the case may be for verification, in physical form on short notice of three working days.

Part- B (Financial Bid): will contain

- a) The Financial Bid for carrying out the scope of work defined for this project.
- b) The Financial Bid is to be submitted in excel file of BOQ.
- c) The Financial Bid will be opened only for the Bidders shortlisted on the basis of Technical Bid.
- d) The date of opening of such Financial Bids will be intimated on the e-proc website

4.6.4. SUBMISSION OF PROPOSALS

- a. Bidder shall submit their bid in electronic format, which shall be digitally signed and further signed & stamped on each page by the designated authorized representative of the Bidder. Bidder shall procure Digital Signature Certificate (DSC) as per guidelines / procedure given on website of e-proc rajasthan.
- b. **Physical submission of bids is not allowed.** Although physical submission of bid is not allowed, but if asked by Tendering Authority the bidder is required to submit original technical bid in hardcopy which shall be the exact replica of online bid submitted. In case of any discrepancy between online and hardcopy Bid, the Bid submitted online shall prevail.

4.6.5. FILLING OF BIDS

- a. Bids shall be submitted on e-portal with the formats and schedules given in the Tender document duly filled in. The completed formats and schedules shall be considered as part of the contract documents in case the same Bidder becomes Successful Bidder. The Bids which are not in conformity to

the schedules and formats of the Tender document, may not be considered.

- b. No alteration should be made to the format and schedules of the tender document. The Bidder must comply entirely with the Tender document.
- c. Tender should be filled in only with ink or typed and must be submitted online after signing digitally.
- d. All additions, alterations and over-writing in the bid must be clearly signed by the authorized representative of the bidder otherwise bid shall be summarily rejected.
- e. The bidder must quote the prices strictly in the manner as indicated herein, failing which bid is liable for rejection. The rate/prices shall be entered in words as well as in figures. These must not contain any additions, alterations, over-writing, cuttings or corrections and any other marking which leave any doubt and further may result in rejection of such Bid.
- f. The Tendering Authority will not be responsible to accept any cost involved in the preparation or submission of bids.
- g. All bids and accompanying documents shall be addressed to Jodhpur Discom.

4.6.6. ALTERNATIVE BIDS

Alternative bids shall not be considered at all.

4.6.7. BID PRICES

- a. All the prices should be quoted only in Indian Rupees (INR) Currency.
- b. The Unit prices **excluding applicable GST** and **Rate of GST applicable in % shall be** quoted as per BOQ.xls The present rates of applicable taxes shall be indicated by the bidder in its Bid, which is subject to statutory variation and shall be borne by Discom.
- c. The bidder will furnish the break-up of the quoted price in Financial Bid according to the FORMAT FOR FINANCIAL BID SUBMISSION, indicating rate and type of each tax clearly, as per the rates prevailing within 7 days before the bid date. Any statutory variation and imposing of new tax by government subsequent to bid submission/currency of Contract shall be on Discom account.
- d. The quantity of total no. of consumers mentioned in respective circle is on average basis and may increase or decrease.

4.7. PERIOD OF VALIDITY OF BIDS

4.7.1. The bid validity period is provided in the table mentioned in the NIT section.

Bids mentioning a shorter validity period than specified shall be rejected.

4.7.2. Tendering Authority may ask for extension in validity period. The Bidder will be at liberty to accept it or not. In case Bidder agrees to extend the validity period without changing his original offer, he will be required to extend validity period of the Bid Security Declaration/ Bank Guarantee submitted against the EMD suitably.

4.8. SIGNATURE OF BIDDER

- 4.8.1. The bid must contain the name, address and place of business of the Bidder and must be signed and sealed by the designated Authorized Representative of the Bidder. The name of such person should also be typed or printed below the signature.
- 4.8.2. Bid by a partnership firm must be furnished with full names of all partners.
- 4.8.3. Bids by corporation/ company must be signed by the Authorized representative of the Bidder with the legal name of the corporation/ company.
- 4.8.4. Satisfactory evidence of authority (Power of Attorney) of the person signing on behalf of the Bidder shall be furnished with the bid.
- 4.8.5. The Bidder's name stated on the proposal shall be exact legal name of the firm.
- 4.8.6. **Bids not conforming to the above requirements of signing shall be disqualified.**

4.9. DELAY IN BID SUBMISSION

The tendering authority shall not consider any bid that arrives after the deadline for submission of bids as indicated in the NIT. Any bid received by the tendering authority after the deadline for submission of bids shall not be accepted.

4.10. RECEIPT OF BIDS

Bids shall only be received through <https://www.eproc.rajasthan.gov.in> website.

4.11. WITHDRAWAL, SUBSTITUTION AND MODIFICATION OF BIDS

A Bidder may substitute or modify its bid after it has been submitted before the deadline prescribed for submission of bids as per the e-tendering process but bidder cannot withdraw his bid after submitting it once.

4.12. BID OPENING

- 4.12.1. Jodhpur Discom shall perform the Bid opening at <https://www.eproc.rajasthan.gov.in> website on the specified date and time.
- 4.12.2. Only the bids of those bidders who qualify the Technical Bid evaluation shall be eligible for Financial Bid opening. The date and time of Financial Bid opening to the technically
- 4.12.3. Qualified Bidders would be intimated later

4.13 EVALUATION AND COMPARISON OF BIDS

Part-1: In case of Bidder is not a Distribution Company and qualifies the PQR as per section A

SN	Parameter	Evaluation Element	Marks	Max Marks
1	Certification CMMI Level 3 or above.	CMMI Level 3	3	5
		CMMI Level 4	4	
		CMMI Level 5	5	
2	The Bidder shall have experience of implementation of Web based Revenue Management System (RMS) in at least 2 Power Distribution utilities anywhere in India during last five (5) years as on date of bid submission. Each project should have minimum 20 lakhs consumers and have been operational for at least 24 months. one project out of above should have a least 45 Lac consumers	= 2 Projects	10	15
		Projects > 2	15	
		> 20 Lacs ≤ 25 Lacs (Both Projects)	5	10
		≥ 25 Lacs (Both Projects)	10	
3	The Bidder shall have experience of implementation of one (1) RMS Project having minimum 45 lakhs consumers and project should be operational for last 24 months as on date of bidding. Above referenced project should have following modules/ functionalities as per RfP. 1. New Connection Management with DMS 2. Metering 3. Billing with Spot Billing 4. Collection 5. Disconnection & Reconnection Management 6. Consumer Web Self Services	For every additional module after 9 modules, 2.5 marks for each module.	15	25
		9 Modules	10	

	7. Energy Audit 8. Customer complaint registration & tracking 9. MIS Reports with Dashboards 10. Feeder Information System 11. Mobile Device Management 12. Mobile App for Consumers 13. Mobile App for Executives/ Officers 14. Mobile App for Consumer Survey, asset tagging on GIS. 15. Mobile Meter Testing. As documentary evidence, Bidder must submit the PO, Performance Certificates along with URLs or Mobile App Store listing.			
4	The bidder should have done integration of proposed RMS with following: 1. ERP 2. MDAS/ AMR System 3. State Level E-Governance System / State Level Single Window Clearance System 4. Meter Data Management System for Smart Meters 5. Customer Care Centre / Call Centre 6. Feeder Monitoring System 7. Payment gateways/systems 8. SMS and Email gateways 9. MDAS high value Consumer AMR. 10. Collection system through commercial Bank	> 7	15	15
		> 5 <= 7 Integrations	10	
		= 5 Integrations One(1) mark each for single integration	5	
5	The Average annual turnover of the bidder in the last 3 financial years Viz., 2017-18, 2018-19, 2019-20.	MAAT ≥ Rs. 70 Crore upto 100 Crore	5	10
		MAAT > Rs. 100 Crore	10	

6	Demonstration of the live system and solution for assessing the readiness and scope fitment of the proposed solution	20	20	20
Total Marks				100

Part-2: In case of Bidder is a Power Distribution Utility and qualifies the PQR as per section B.

SN	Parameter	Evaluation element	Marks	Max Marks
1	Consumer Base experience of for at least 15 Lakhs live consumer base in its area of operation in any single area of distribution, for a continuous period of 24 months during last 3 financial years i.e. FY2017-18, 2018-19, 2019-20.	≥ 15 and ≤ 20 Lakhs	40	80
		> 20 and ≤ 25 Lakhs	60	
		> 25 Lakhs	80	
2	Demonstration of the live revenue Management system for assessing the readiness and scope fitment of the proposed solution.		20	20
Max Marks				100

The bidders who qualify the Technical Bid shall be short listed for opening of financial offer.

Evaluation of Financial Offers

Evaluation shall be on the basis of Combined Quality Cum Cost Based System (QCBS) as under:

1. The method of selection is QCBS (Quality Cum Cost based selection) and the calculation / evaluation will be done manually.
2. The score of technical proposal will be allotted weightage of 60%, while the score of financial proposal will be allotted weightage of 40%.
3. The technical score will be arrived at after evaluation of technical bids as per the section Technical Evaluation Parameters.
4. All the received bids will be evaluated first on the basis of Pre-qualification requirement prescribed in "Pre-Qualification Requirement" of this specification and on the basis of adherence to conditions given in this document. If the bidder meets all the Prequalification requirements,

thereafter the technical score will be calculated for each of the qualifying bidder on the basis of criteria.

5. Financial Bids of only those bidders will be opened, who score at least 60 out of 100 in the Technical Scoring in addition to fulfilling pre-qualification criteria as above.
6. Proposal with the lowest cost will be given a financial score of 100 and financial Scores for other than L1 Bidders will be evaluated using the following formula:

Financial Score of a Bidder (Fs) = (Financial Bid Amount of L1/ Financial Bid Amount of the Bidder) X 100.

Bidder	Financial Bid Amount Rs. In Crore	Financial Score
Bidder-1	110	90.909
Bidder-2	105	95.238
Bidder-3	100	100.000

7. The Total Score, both technical (Ts) and financial (Fs), will be obtained by weighing the quality and cost scores and adding them up. The total score will be calculated as follows:
Total Score = 0.60 x Ts + 0.40 x Fs
8. On the basis of the combined weighted score for quality and cost, the bidder shall be ranked in terms of the total score obtained. The proposal obtaining the highest total score in evaluation of quality and cost will be ranked as H1 followed by the proposals securing lesser marks as H2, H3 etc. The proposal securing the highest total Score and ranked H1 shall be recommended for award of contract.
9. If the total scores are 'tied', the Bidder securing the highest technical score will be adjudicated as the Best Value Bidder for award of the Contract.
10. Negotiations shall be conducted by the tender sanctioning and procurement committee with the bidder having highest final score as per RTPP Act, 2012 & its Rules 2013 and their amendments, if required.

4.14 CONFIDENTIALITY

- 4.14.A Information relating to the examination, evaluation, comparison, and post qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until publication of the Contract award.
- 4.14.B Any attempt by a bidder to influence the tendering authority or other officials of Discom in the examination, evaluation, comparison, and post

qualification of the Bids or Contract award decisions shall result in the rejection of his bid.

- 4.14.C From the time of Bid opening to the time of Contract award, if any Bidder wishes to contact the Tendering Authority on any matter related to the Bidding process, he is allowed to do so in writing.

4.15 NON-MATERIAL NON-CONFORMITIES

Provided that a bid is substantially responsive, the Tendering Authority, to rectify omission in the bid related to requisite documents may request the bidder to submit the necessary information or documentation provided that the required information was in existence as on date of opening of bid. No new information created after opening of bid shall be considered.

4.16 DISQUALIFICATION

Tendering authority may at its sole discretion and at any time during the processing of bid, disqualify any bidder/ bid from the bid process on following grounds:

- (i) Any action on the part of the bidder to revise the rates/prices and modification in technical or commercial substance of Bid, at their own.
- (ii) Submission of any supplementary information unless & otherwise asked for at his own instance after the opening of the Bid may result in rejection of the Bid and also debar him from submission of Bid to the Discom at least for one year.
- (iii) The Bidder has been disqualified from any other Discom for any violation of code of conduct.
- (iv) In case of bidder not adhering to the format of financial offer given with this document the bid / offer may be rejected / non-responsive.
- (v) In case of any misapprehension at bidder level which may lead to wrong price bidding, Discom reserve the right to reject the bid or take necessary loading / unloading to arrive the correct price as per aspersions of Discom / tender specification. Accordingly, the bidders are advised to ask to clarify about any misapprehension before bidding. No excuse shall be considered in this regard.
- (vi) Does not meet the Qualification Requirement (QR) as mentioned in the bidding document.
- (vii) During validity of the bid or its extended period, if any, increases his quoted prices.
- (viii) Has imposed conditions in his bid.
- (ix) Has made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements.
- (x) Has been black listed, by any utilities of India during Last 5 years.

- (xi) Has submitted bid which is not accompanied by required documentation and Bid Security Declaration/Tender document fees/Processing fees.
- (xii) Company / Firm involved in fraudulent practice or submitted fake certificates for securing qualification, entry into bidding process, facing criminal charges, directors of the company / firm facing criminal trial proceedings shall be disqualified.

Note:

The Bidder should be qualified, not be insolvent, not be in receivership, not be bankrupt or being wound up, should not have affairs administered by a court or a judicial officer, should not have business activities suspended, should not be blacklisted or debarred by any utility/ government agency, should not have a conflict of interest.

Bidders may specifically note that while processing the bid documents, if it is found, expressly or implied, that some bidders may have compounded in any manner whatsoever or otherwise joined to form a cartel resulting in delay/ holding up the processing of bids then the bidders so involved are liable to be disqualified for the contract as well as for a further period of two years from participation in any of the bids floated by any department, Govt. of Rajasthan.

4.17 AWARD OF CONTRACT

ACCEPTANCE OF THE TENDER/BID AND NOTIFICATION OF AWARD

- a. After the selection of the Successful Bidder by the Tendering Authority within the validity period of Bid, shall inform such Bidder in writing by issuing Letter of Intent (LOI).
- b. The Successful Bidder shall send an acknowledgement of the LOI to the Discom, post which the Jodhpur Discom shall prepare and send a detailed work order to the Successful Bidder. In case, the Successful Bidder refuses to accept LOI, and not intent to perform the scope of work, the offer shall be rejected with forfeiture of its Bid Security Declaration and order may be placed to the bidder having second highest final score.
- c. Jodhpur Discom shall issue Work Order to the Successful Bidder requiring him to do the following things within specified timeline. If the Bidder fails to do the following things within specified timeline, Bid Security Declaration of such Bidder may be forfeited and Tendering Authority of Discom may consider the next ranked bidder.

- (i) Written Letter of Acceptance of Work Order along with duly signed and sealed copy of such Work Order as token of such acknowledgement within 7 working days.
 - (ii) Submission of Performance Guarantee as required to be submitted under the Contract within 14 working days.
 - (iii) Signing of the Contract (based on the terms & conditions of this Tender Document) with the Discom within 14 working days after issue of Letter of Award to the Successful Bidder. In case any of the party (Discom and the Successful Bidder) is unable to sign the Contract Agreement within 14 working days, it shall inform the other party in advance regarding the same along with the reason and suitable time for signing of the Contract.
- d. Decision on bids shall be taken within original validity period of offers. If the decision on acceptance or rejection of a bid cannot be taken within the original bid validity period due to unavoidable circumstances, all the bidders shall be requested to extend validity period of their bids up to a specified date. It is discretion of bidder to accept the extension or not. Those bidders who do not accept shall be discontinued from the bid process and their Bid Security Declaration may be refunded.
 - e. Until a formal Contract is prepared and signed, the Work Order/ LOI shall constitute a binding Contract.
 - f. The Letter of Intent shall be issued to the successful bidder by Jodhpur Discom and subsequently, the detailed Letter of Award shall be issued by the Jodhpur Discom as per their quantities and Price.

4.18 SIGNING OF CONTRACT

- 4.18.1 The successful bidder will, on receipt of Work Order from the Discom enter into a contract with the DISCOM by jointly signing the Contract.
- 4.18.2 The draft of the Contract based on the terms & conditions of this RfP will be forwarded by JODHPUR DISCOM along with the letter of award to the successful bidder for execution.
- 4.18.3 The Contract will be signed within fourteen days thereafter. The person to sign the Contract must be duly authorized by the Bidding entities.

4.19 RESERVATION OF RIGHTS

To take care of unexpected circumstances, Tendering Authority shall reserve the rights for the following:

- (i) Extend the last date & time for submission of the bids.
- (ii) Amend the Tender Document at any time prior to the last date & time of submission of Bids.

- (iii) To reject any bid without assigning any reasons.
- (iv) Terminate or abandon the bidding procedure or the entire project whether before or after the receipt of bids.
- (v) Seek the advice of external consultants to assist JODHPUR DISCOM in the evaluation or review of bids.
- (vi) Make enquiries of any person, company or organization to ascertain information regarding the bidder and its bids.
- (vii) Reproduce for the purposes of the procedure the whole or any portion of the bids despite any copyright or other intellectual property right that may subsist in the bids.

Note: Direct or indirect canvassing on the part of the Bidder or his representative would be a ground for disqualification of such Bidder from this process.

4.20 LACK OF COMPETITION

A situation may arise where, after evaluation of Bids, the Tendering Authority may end-up with one responsive bid only. In such a situation, the Tendering authority will act as per **RTPP Rule 2013, CLAUSE 68, "Lack of Competition"** will be applicable and accordingly measures will be taken.

4.21 General

- 4.21.1 Discom does not bind itself to accept the lowest or any bid or any part of the bid and shall not assign any reason(s) for the rejection of any bid or a part thereof.
- 4.21.2 The fact of submission of bid to the JODHPUR DISCOM shall be deemed to constitute an agreement between the Bidder and the Discom whereby such bid shall remain open for acceptance by the Discom and Bidder shall not have option to withdraw his offer, impair or derogate the same. If the Bidder is notified during the period of validity of bid that his bid is accepted by the Discom, he shall be bound by the terms of agreement constituted by his bid and such acceptance thereof by the Discom, until formal contract of the same bid has been signed between him and Discom in replacement of such agreement.
- 4.21.3 The successful bidder will have to sign the contract agreement for the proper fulfilment of the contract. In case of ambiguous or contradictory terms and conditions mentioned in the Tender Document/ Bid, interpretations as may be advantageous to Discom may be taken, if satisfactory clarification is not furnished within the prescribed period.
- 4.21.4 Discom will not be responsible for any cost or expenses incurred by the bidder in connection with preparation or submission of bids.
- 4.21.5 JODHPUR DISCOM reserves the right to:
 - a) Reject or accept any bid.
 - b) Cancel the bid process and reject all applications.

- c) JODHPUR DISCOM shall neither be liable for any action nor be under any obligation to inform the bidders of the grounds for any of the above actions.

Note: Discom has given some of the towns on Distribution Franchise/MBC model like Jodhpur and Bhilwara town, Banswara Town in Jodhpur Discom. In such case, if any existing Distribution Franchisee / MBC agency in JODHPUR DISCOM request to avail all facilities / features under this Revenue Management System contract, the same shall be extended by contractor (successful bidder) under same prices and terms if the Franchisee / agency so desires, subject to approval of Jodhpur Discom.

4.22 SPECIAL CONDITIONS OF TENDER

- 4.22.1 The system to be deployed under this contract shall be SOA (Service Oriented Architect) based and shall have mandatorily to be integrated with R-APDRP system.
- 4.22.2 Apart from the above, the system shall have capability for integration with 3rd party software with Operating system, Database as well as Application/middleware. Vendor has to integrate all 3rd party software as and when asked by JODHPUR DISCOM provided that such system are SOA compatible.
- 4.22.3 Vendor has to mandatorily integrate the system with Feeder Monitoring System (Built by M/s Lampex through the RECTPCL / or similar agency / department), Distribution Transformer Monitoring, SCADA/DMS, RT-DAS, SMART METERING MDM SYSTEM, DT/CONSUMER AMR MDM SYSTEM, Revamped Reforms Based and Results Linked Distribution Sector Scheme, IPDS schemes etc. Further, the vendor has to mandatorily integrate the system with all types and categories of modems / DCU already installed or to be installed at consumer meter / feeder meter / boundary meter / 33kV sub-station / DT meters / pre-paid meter / smart meters/ net-meter etc.
- 4.22.4 All the middleware in the form of Hardware, software & firmware required for such integration is part of scope of Work and included in the cost offered.
- 4.22.5 For integration, necessary support and requisite data / service library shall be shared / provided by both Bidder and Discom.
- 4.22.6 Google Map or any GIS map: - As per requirement of scope of work, the user rights from respective GIS map provider is included in scope of work at no additional cost to Jodhpur Discom.
- 4.22.7 If the services of the vendor are not as per the awarded work for three consecutive months after commencement of work then Discom will have liberty to terminate the contract.
- 4.22.8 The Service provider shall maintain the confidentiality of data base. A separate NDA (Non-Disclosure agreement) shall be signed by the service provider.
- 4.22.9 The Service provider will ensure the migration of all the master data, geo data and transaction data pertaining to consumer meter reading, billing, collection, complaints and any other items which may be critical and

necessary for being available to run all the proposed applications, efficiently and effectively.

- 4.22.10 The Service provider shall transfer /upload the existing master data of old consumers / payment details / outstanding details / security deposit details / meter details / previous meter readings / instalment details and any other relevant data, which are required to run the proposed revenue and customer management application systems.
- 4.22.11 All the required license/subscriptions, license/subscription updates / Licenses/subscription renewal / AMC of Licenses, Hardware AMC, software updates, Change request mobile application updating is the responsibility of vendor within the quoted price till currency of contract.
- 4.22.12 The system shall be used in various geographical area of Discom and should be satisfactory for operation under tropical conditions of Rajasthan and shall be able to maintain the desired output and withstand a wide range of temperature & climatic experience in the area under scope.
- 4.22.13 The system shall have integration capabilities with future or present HES/MDM/MDA Software's/system for importing & exporting of meter data for billing, meter data analysis, forecasting, demand side management etc.
- 4.22.14 The system shall provide BI and Reporting tools for generation of MIS, Reports, Dashboards to help DISCOM Officers and Management in taking decisions for reducing losses, optimizing operations and enhancing customer satisfaction etc. All AENs, XENs, SEs, Chief Engineers, CAOs, CCoA, Corporate Office, Accounts Officers, JENs, AROs, Ledger Keepers and relevant officials / designated officers shall use the system. **This is informative only but licensing shall be Enterprise Wide without constraint of number of users.** It is mandatory that all software licenses/subscriptions should be enterprise level in nature with unrestricted, full use and all software licenses / subscription should be in name of Jodhpur DISCOM. The system shall have Capability to Integrate with any existing and future systems like ERP, e-office, Smart Metering/AMI, DT metering & Consumer AMR, RT-DAS, SCADA/DMS, pre-paid/post-paid metering, Revamped Reforms Based and Results Linked Distribution Sector Scheme, IPDS schemes etc. on Industry Standard data exchange mechanism.

4.22.15 Licensing Policy : Type of Software Policy

Licenses for applications for all modules including GIS shall be in the name of Jodhpur Vidyut Vitran Nigam Limited. All the licenses shall be owned by Jodhpur Vidyut Vitran Nigam Limited and even after the end of contract period i.e. All licenses shall be owned perpetually by Jodhpur Vidyut Vitran Nigam Limited. Jodhpur Vidyut Vitran Nigam Limited and any new entity that emerges shall have complete right to use these licenses. Enterprise wide license that will allow full functionality covering edit / addition / deletion facility to all users of Jodhpur Discom without the constraint of specific number of user licenses. There will be two types of clients - VPN and Web Client. The purchaser shall be at liberty to deploy the solution anywhere within the Jodhpur Discom. In future, if any

entity or distribution franchisee or any agency consigned by Discom any any business model emerges in the Jodhpur Vidyut Vitran Nigam Limited, the solution will also be deployed for that entity or distribution franchisee or any agency consigned by Discom any any business model at no additional cost to Jodhpur Discom. The bidder shall provide Enterprise wide license. This license may be a single license for a server irrespective of number of CPU/Core or on the basis of Number of CPU/Core. The cost of all type of license (e.g. Operating System for desktop as well as Android based Smart Mobile Phone, SQL Server, Data Base, MS Office, Windows/Linux/Unix etc. shall be borne by the bidder and no extra cost shall be payable for all kind of licenses by Discom. Definition of Enterprise: The Enterprise shall mean Jodhpur Vidyut Vitran Nigam Limited and any new entity emerges for power distribution & trading purpose, within the Jodhpur Vidyut Vitran Nigam Limited. However, all the licenses shall be procured in the name of Jodhpur Vidyut Vitran Nigam Limited.

- 4.22.16 The system shall the capability to transfer / upload the required data in requisite format on the National Power Portal (NPP) / any other portal desired by the Discom.
- 4.22.17 All kinds of data not limited to only records but any kind data related to Revenue Management System will be remain the property of JODHPUR DISCOM and accessible to JODHPUR any time.
- 4.22.18 The Software shall have an Energy Audit module for enabling energy audit at various levels with drill down options. The module shall have interfaces for integrating with 11kV Rural Feeder Monitoring System, SCADA/DMS, RT-DAS, ERP, SMART METERING SYSTEM, DT/FEEDER/CONSUMER AMR, Revamped Reforms Based and Results Linked Distribution Sector Scheme, IPDS schemes and other system's for importing/exchanging the Input Energy, interfaces for capturing and computing assessed energies, billed energies as various points for deriving the energy loss calculations, Billing Efficiency, Collection Efficiency and Distribution and AT&C Losses.
- 4.22.19 All necessary Apps and software required for the Android and iOS based Smart Devices, PCs etc., to be deployed on the ground including Mobile Apps and Web services both for use by Discom personnel and Customers are to be provisioned for.
- 4.22.20 The system shall have provision to send SMS, EMAIL, Notifications, Alerts through mobile app, etc., both for the enterprise users and consumers. The necessary SMS packages and SMS gateway shall be provided by the DISCOM and the Email gateway shall be arranged by bidder at its own cost.
- 4.22.21 The system shall have provision to display all the key performance indicators as decided by the DISCOM in the dashboards and the same shall be displayed on video display units supplied at all sub divisions, divisions, zone, circle & DISCOM HQ as indicated in the RFP. As the system has been provisioned with BI & report builder Tool, there shall be no limitations of number of reports through the system. The system shall be designed in such a way that on the basis of input received per billing

and other systems, this system can be utilized to deliver different reports, as and when desired by the SE (IT) / CAOs or any other designated officer of the Discom.

- 4.22.22 The system and constituent software modules would also need to interface with ERP / e-office systems being separately procured by Jodhpur Discom. This is desired to synchronize and streamline business processes, eliminate repetitive processes, improve the accuracy, consistency and security of data, simplify and organize inventory tasks and integrate accounting and financial reports.
- 4.22.23 The System shall have Mobile Device Management features inbuilt for managing all the enterprise mobile devices used/associated in/with the project. The software shall have specific feature of over the air updating of apps whenever updates or newer version are released.
- 4.22.24 The system shall have inbuilt GIS maps to facilitate the capture of electrical network asset details with geo-coordinates/references, consumer geo-tagging. The system shall also have facility to display various key parameters on the GIS Maps. The system should have facility to view the single line diagram of any feeder/feeders along with the HT, LT Network and the consumer information based on the options selected. The system shall help Feeder In-charges and O&M personnel for route mapping, locating asset/consumer, modifying or relocating the various information captured/available.
- 4.22.25 The system shall facilitate to capture electrical network asset details with geo-coordinates/references, consumer geo-tagging. The system shall also have facility to display various key parameters on the GIS Maps.
- 4.22.26 Time is of essence in this Project. The successful Bidder is expected to implement the systems including supply of Android Smart Devices and field PCs/printers/devices for the project area as per the schedules indicated in the RFP.
- 4.22.27 The Contract will also necessitate providing Project Management and support personnel across the Discom in various Offices as listed.
- 4.22.28 JODHPUR DISCOM shall provide space, electricity etc. and requisite internet connectivity with sufficient bandwidth at Offices at Circle, Division and Sub Division. However SIM Card with GPRS (4G or better) connectivity with suitable data packs for Android based Smart Mobile Phone is under the scope of the Agency. The offered solution should be savvy and should be capable to run on 512kbps bandwidth from data centre to client location.
- 4.22.29 Discoms will have several applications which needs to be seamlessly integrated with the front-end environment. These applications may be GIS, SCADA, RT-DAS, Smart Metering, DT/Feeder/Consumer AMR, 11kV RFMS, Call Center, Kiosk, Revamped Reforms Based and Results Linked Distribution Sector Scheme, IPDS schemes etc. The integration architecture should be defined in a way such that it allows easy manageability, configurability, scalability and easy integration of any future systems which need to interact with the core application stack.

4.22.30 Key Principles of Integration Design

- a) Loosely coupled Interfaces : Interfaces will be loosely coupled, backward compatible, self-describing and offer a low impact to Discoms, if changed
 - b) Publish Integration points: Public inputs and outputs of an application must be known, published and understood to promote open data exchange and interfaces for enterprise application integration.
 - c) Platform independent, open standards: Open standards and industry standards are preferred for enterprise application integration solution. Mechanisms should be language and platform-independent.
 - d) Reusable, Shared Services: Based on a service-oriented architecture (SOA), and other forms of Application Program Interfaces (API), are preferred to direct data access.
 - e) Minimize Application Impact: Enterprise application integration mechanisms used should be non-invasive to the applications as much as possible. For instance, data transformation should be done externally from the applications involved.
- 4.22.31 **Reference Integration Architecture** : The applications needs to be integrated through a middleware and will have a common portal front-end. MIS formats will be as per the prevailing formats of Discoms and may change from time to time. The vendor needs to incorporate all such changes in MIS suggested by Discoms. All the expenditure required for integration and any hardware and software needed shall be on the part of the successful bidder.
- 4.22.32 The architecture should be designed in a way that it should be possible to segregate the application and database of various offices as per hierarchy of the JODHPUR DISCOM. The segregation mechanism should be flexible and at no cost to the JODHPUR DISCOM.
- 4.22.33 The selected vendor will provide the training on the various applications to Discoms' training groups which is in the range of 15-20 per Circle with each group comprising of minimum 10 persons.
- 4.22.34 Any queries on this bid document that want to be discussed during Pre-Bid Conference should be emailed to seitajm.JDVVNL@rajasthan.gov.in
- 4.22.35 All application software, hardware, data, plans, drawings, specifications, designs, reports and other documents procured or developed by the selected Vendor in the execution of the contract shall remain the property of the Jodhpur Discom, right from the beginning of the contract, during the whole duration of the project and after the expiry or termination of the contract. The JODHPUR DISCOM shall also remain the sole owner of the property (Hardware / software) in case the contract is terminated for any other reasons.
- 4.22.36 The latest updated version of RMS application suite and its source code of the customized part of the application software will remain the exclusive property of the Jodhpur Discom, even after the termination or expiry of the contract. The ownership shall remain with the JODHPUR DISCOM in case the selected Vendor fails to execute tasks to the satisfaction of the Jodhpur Discom.

- 4.22.37 The selected Vendor shall indemnify the JODHPUR DISCOM against all third party claims of infringement of patent, trademark / copyright arising from the use of the supplied software, hardware and related services or any part thereof. The intellectual property rights shall belong to the Jodhpur Discom. The JODHPUR shall be at liberty to deploy the solution anywhere within the jurisdiction of Jodhpur Discom. In future, if any entity emerges in the Jodhpur Discom, the solution will also be deployed there.
- 4.22.38 If Jodhpur Discom issues any amendment to this RFP document till the date of opening of this bid document, those amendments will become an integral part of this bid document.
- 4.22.39 Licensing Policy for various applications and solutions : Enterprise wide license that will allow full functionality to all users of entire JODHPUR DISCOM without the constraint of user specific licenses. There will be two types of clients - VPN and Web Client. The licensing should cover edit / addition / deletion facility to all users of Jodhpur Discom.
- 4.22.40 Scope of Bid : In support of the Invitation for Bids indicated in the RfP, the Purchaser, as indicated in the RfP, issues this Bidding Document for the supply of Goods and Related Services incidental thereto as specified in the Scope of Work.
- 4.22.41 Corrupt Practices : Purchaser requires bidders to observe the highest standard of ethics during the procurement and execution of such contracts.

The following definitions apply:

- a) "Corrupt practice" means the offering, giving receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any party in the procurement process or the execution of a contract;
- b) "Fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
- c) "collusive practices" means a scheme or arrangement between two or more bidders, with or without the knowledge of the Purchaser, designed to influence the action of any party in a procurement process or the execution of a contract;
- d) "coercive practices" means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract;

Purchaser will reject a proposal for the award of Contract if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract

Any communication between the bidder and the purchaser related to matters of alleged fraud or corruption must be made in writing.

Rule 80 of the RTPP Rules 2013: Code of integrity:-

- (1) All the officers or employees of the procuring entity shall,-
- (a) Maintain an unimpeachable standard of integrity both inside and outside their office;
 - (b) act in accordance with the provisions of the Act, these rules, guidelines issued under the Act and instructions;
 - (c) not allow any bidders to have access to information on a particular procurement, before such information is available to the public at large;
 - (d) not intentionally use unnecessarily restrictive or "tailored" specifications, terms of reference or statements of work that can discourage competition;
 - (e) not solicit or accept any bribe, reward or gift or any material benefit of any directly or indirectly promise of future employment from anyone, who has sought or is seeking procurement from the procuring entity;
 - (f) not have a financial interest in any bidder(s) responding to a procuring entity's bidding process and any person having financial interest in any bidder shall not participate in that procurement process;
 - (g) not disclose proprietary and source selection information, directly or indirectly, to any person other than a person authorised to receive such information;
 - (h) treat all bidders in a fair and equitable manner in line with the principle of fairness, integrity and transparency in the procurement process;
 - (i) provide all bidders identical information at the same time, during the bidding process;
 - (j) apply the same criteria of evaluation as specified in the bidding documents, bidder registration documents or pre-qualification documents and under no circumstances new evaluation criteria shall be introduced during the evaluation process;
 - (k) not entertain any favour, recreation, presents, services, etc. from the bidders or prospective bidders;
 - (l) protect the interests of the procuring entity under all circumstances while dealing with information and information sources;
 - (m) maintain confidentiality of all bids;
 - (n) ensure that the selection of bidder is as per the bidding documents and is not influenced by personal reasons attributable to concerned officials in any manner; and
 - (o) disclose conflict of interest, if any.
- (2) Any person participating in procurement process shall,-
- (a) not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
 - (b) not misrepresent or omit information that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
 - (c) not indulge in any collusion, bid rigging or anticompetitive behaviour to impair the transparency, fairness and progress of the procurement process;
 - (d) not misuse any information shared between the procuring entity and the bidders with an intent to gain unfair advantage in the procurement process;

- (e) not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (f) not obstruct any investigation or audit of a procurement process;
- (g) disclose conflict of interest, if any; and
- (h) disclose any previous transgressions with any entity in India or any other country during the last three years or any debarment by any other procuring entity.

Rule 82 of RTPP Rules, Breach of code of integrity by the bidder:

Without prejudice to the provisions of Chapter IV of the RTPP Act 2012, in case of breach of any provision of integrity by a bidder or prospective bidder, as the case may be, the procuring entity may take appropriate action in accordance with the provisions of subsection (3) of section 11 and section 46 of RTPP Act, 2012.

Interference with procurement process.-

(1) Whoever-

- (a) interferes with or influences any procurement process with the intention of securing any wrongful gain or undue advantage for any prospective bidder or bidder; or
- (b) interferes with the procurement process with the intention of causing any unfair disadvantage for any prospective bidder or bidder; or
- (c) engages in any action or lobbying, directly or indirectly, with the objective of unduly restricting fair competition; or
- (d) intentionally influences any procuring entity or any officer or employee thereof or wilfully or fraudulently makes any assertion or representation that would restrict or constrain fair competition in any procurement process; or
- (e) engages a former officer or employee of a procuring entity as an employee, director, consultant, adviser or otherwise, within a period of one year after such former officer or employee was associated with a procurement in which the employer had an interest; or
- (f) engages in any form of bid-rigging, collusive bidding or anticompetitive behaviour in the procurement process; or
- (g) intentionally breaches confidentiality referred to in section 49 for any undue gain, shall be punished with imprisonment for a term which may extend to five years and shall also be liable to fine which may extend to fifty lakh rupees or ten per cent of the assessed value of procurement, whichever is less.

(2) A bidder who-

- (a) withdraws from the procurement process after opening of financial bids;
- (b) withdraws from the procurement process after being declared the successful bidder;
- (c) fails to enter into procurement contract after being declared the successful bidder;

- (d) fails to provide performance security or any other document or security required in terms of the bidding documents after being declared the successful bidder, without valid grounds, shall, in addition to the recourse available in the bidding documents or the contract, be punished with fine which may extend to fifty lakh rupees or ten per cent of the assessed value of procurement, whichever is less.

Vexatious appeals or complaints.-

Whoever intentionally files any vexatious, frivolous or malicious appeal or complaint under this Act, with the intention of delaying or defeating any procurement or causing loss to any procuring entity or any other bidder, shall be punished with fine which may extend to twenty lakh rupees or five per cent of the value of procurement, whichever is less.

Debarment from bidding.-

- (1) A bidder shall be debarred by the State Government if he has been convicted of an offence -
 - (a) under the Prevention of Corruption Act, 1988 (Central Act No. 49 of 1988); or
 - (b) under the Indian Penal Code, 1860 (Central Act No. 45 of 1860) or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.
- (2) A bidder debarred under sub-section (1) shall not be eligible to participate in a procurement process of any procuring entity for a period not exceeding three years commencing from the date on which he was debarred.
- (3) If a procuring entity finds that a bidder has breached the code of integrity prescribed in terms of section 11, it may debar the bidder for a period not exceeding three years.
- (4) Where the entire bid security or the entire performance security or any substitute thereof, as the case may be, of a bidder has been forfeited by a procuring entity in respect of any procurement process or procurement contract, the bidder may be debarred from participating in any procurement process undertaken by the procuring entity for a period not exceeding three years.
- (5) The State Government or a procuring entity, as the case may be, shall not debar a bidder under this section unless such bidder has been given a reasonable opportunity of being heard.

By signing the contract, the bidder shall represent that it is either the owner of the Intellectual Property Rights (IPR) in the hardware, software or materials offered, or that it has proper authorization and/or license to offer them from the owner of such rights. Willful misrepresentation of these facts shall be considered a fraudulent practice. without prejudice to other remedies that the Purchaser may take.

- 4.22.42 Eligible Goods and Related Services : For the purpose of this Clause, the term "Goods" includes hardware, software, networking equipments and cables; and "Related services" includes services such as insurance, transportation, associated documentation, installation, customization,

integration, field survey, testing and commissioning, training, technical support, maintenance, repair and other necessary services to be provided by the selected bidder and necessary for successful implementation of the project as specified in the contract. In case Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods.

- 4.22.43 Clarification of Bidding Document: The Invitation for Bids issued by the Purchaser is a part of the Bidding Document. The Purchaser is not responsible for the completeness of the Bidding Document and its addenda, if they were not obtained directly from the Purchaser. The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the Bid. A prospective Bidder requiring any clarification of the Bidding Document shall contact the Purchaser in writing at the Purchaser's address indicated in the RfP. The Purchaser shall forward copies of its response to all Bidders who have acquired the Bidding Document directly from it, including a description of the inquiry but without identifying its source. The Purchaser will organize a pre-bid conference at the time and place indicated in RfP. The purpose of the conference will be to clarify issues and answer queries that the bidders might have. Bidders are requested to submit the queries in writing to reach the purchaser not later than 5 days before the conference. Queries and responses shall be communicated to the prospective bidder, if deemed proper. Any modifications to the Bidding document, which may become necessary as a result of pre-bid conference shall be made by the Purchaser exclusively by issuing Addendum and not through the clarifications of the pre-bid conference.
- 4.22.44 Amendment of Bidding Document : At any time prior to the deadline for submission of the Bids or the award of the contract, the Purchaser may amend the Bidding Document by issuing addenda. The Purchaser, at its discretion for any reason whether at its own initiative or in response to a clarification requested by a bidder may add, modify or remove any element of the Goods (including hardware, software, networking, etc) or any component of Related Service entirely or any part thereof from the bid document till the time of award of contract. All bidders will be notified of any such change. In order to provide prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser may, at its discretion, extend the last date for the receipt of Bids. Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document directly from the Purchaser. To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Purchaser may, at its discretion, extend the deadline for the submission of the Bids.

- 4.22.45 Cost of Bidding : The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- 4.22.46 Language of Bid : The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be written in the English. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, such translation shall govern.
- 4.22.47 Alternative Bids : Alternative (alternate technology/ architecture/design/functionality or proposals with multiple options) bids shall be rejected.
- 4.22.48 Currencies of Bid : Bidders have to express their bid price in Indian Rupees only.
- 4.22.49 Period of Validity of Bids : Bid shall remain valid for the period 90 Days from the date of Financial Bid Opening or 120 days from the date of opening of Technical bid (whichever is later). Bid Security shall remain valid for the period of 180 days from date of Technical Bid opening. If required, the Period of Validity of Bids and Bid Security shall have to be extended as per requirement of JODHPUR DISCOM. A Bid valid for a shorter period shall be rejected by the Purchaser as non responsive. In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid.
- 4.22.50 The Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the signing of the Contract with the successful Bidder.
- 4.22.51 Format and Signing of Bid : The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid, except for un-amended printed literature, shall be signed or initialled by the person signing the Bid. Response Formats duly filled along with supporting documents shall be page numbered and stitched, book bound as one volume. Each page of the bid (along with the supporting documents including CVs) should be signed by the authorised signatory. The documents submitted in any other way is liable to be rejected.
- 4.22.52 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the Bid.
- 4.22.53 The bid shall only be submitted through online tendering system of www.eproc.rajasthan.gov.in.

4.22.54 Bidders who wish to participate in this tender will have to register on <https://www.eproc.rajasthan.gov.in> To participate in online tenders, Bidders will have to procure Digital Signature Certificate (Type - II or Type - III) as per Information Technology Act-2000 using which they can sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency i.e. TCS, Safecrypt, Ncode etc. or they may contact e-Procurement Cell, Department of IT & C, Government of Rajasthan for future assistance. Bidders who already have a valid Digital Certificate need not to procure a new Digital Certificate.

Contact No. 0141 - 4022688 (Help desk of RISL - 10.00 AM to 6.00 PM on all working days)

E-mail: eproc@rajasthan.gov.in

Address: e-Procurement Cell, RISL, Yojana Bhawan, TilakMarg, C-Scheme, Jaipur.

Bidders should go through the website <https://www.eproc.rajasthan.gov.in> should refer to the website and go through the link "Help For Contractors", "Information About DSC", "FAQ" and "Bidders Manual Kit" and Section-I to know the process for submitting the electronic bids at the website.

The 'Instructions to bidders' and other terms and conditions of this tender pertaining to the bidding process generally follow the guidelines of e-tendering system of the government of Rajasthan, available at URL <https://www.eproc.rajasthan.gov.in>. However, wherever there is any anomaly between the conditions referred to in this tender document and the GoR e-tendering system, the latter shall be final.

The complete tender document has been published on the websites, www.energy.rajasthan.gov.in/JDVVNL and <https://www.eproc.rajasthan.gov.in> for the purpose of downloading.

The downloaded tender document shall be considered valid for participation in the bid process subject to submission of required Tender fees, e-Tender Processing Fee and BID SECURITY as mentioned in the RfP. A copy of receipt of the tender fees, e-Tender Processing Fees & BID SECURITY must be enclosed along with the Technical bid/ proposal failing which the bid will be summarily rejected. The last date of submission of these Original instruments is mentioned in the NIT Table. The Bidder must take due care in submitting the instruments and collecting receipts from Jodhpur Discom so that the Originals are submitted in hard copy and receipt scans are uploaded with the Technical Bid, before the Bid Submission Deadline. The Bid security shall be submitted by the interested bidder to the Discom for securing fulfilment of any obligation in terms of the provision of the bidding document.

All the communication/ correspondence including the bid document (Technical and Financial Bid) should be signed digitally by the Bidder. The Technical and Financial Bid which is uploaded on eproc portal must be

signed and stamped on each relevant page by the designated Authorized Representative of the bidder. The name, designation and authority of the designated Authorized Representative of the Bidder shall be stated in the Bid.

- 4.22.55 No contractual obligation whatsoever shall arise from the tender document/bidding process unless and until a formal contract is signed and executed between the purchaser and the successful bidder(s).
- 4.22.56 Purchaser disclaims any factual/ or any other errors in this tender document (the onus is purely on the individual bidders to verify such information) and the information provided herein are intended only to help the bidders to prepare a logical bid.
- 4.22.57 Bids will be considered only in the prescribed manner. Bids not submitted in the prescribed format will be summarily rejected without further evaluation. The complete bidding process is defined in the tender document.
- 4.22.58 Copies of various documents to be enclosed along with the bids must be legible and be self-attested by the authorized signatory with official seal. Claims made by bidder related to the project experience and other requirements shall be considered only when appropriate supporting documents are provided.
- 4.22.59 No Bid shall be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified.
- 4.22.60 **Confidentiality:** Information relating to the examination, evaluation, comparison and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any attempt by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post qualification of the Bids or Contract award decisions may result in the rejection of its Bid. From the time of opening the Technical Proposals to the time of Contract award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it should do so in writing. If the bidder or any of his representatives meet the Purchaser's personnel, it will be considered as "coercive practices", and may result in rejection of the bid.
- 4.22.61 **Clarification of Bids :** To assist in the examination, evaluation, comparison and post-qualification of the Bids, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change in the prices or substance of the Bid shall be sought, offered, or permitted.
- 4.22.62 **Responsiveness of Technical Proposal:** The Purchaser's determination of the responsiveness of a Technical Proposal is to be based on the contents of the Technical Proposal itself. A responsive Technical Proposal is one that conforms to all the mandatory requirements, terms, conditions, and specifications of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is

one that does not meet all the mandatory requirements affects the scope, quality, or performance of the Goods and Related Services specified in the Contract; or limits or is inconsistent with the Bidding Document, the Purchaser's rights or the Bidder's obligations under the Contract; or if rectified would unfairly affect the competitive position of other Bidders presenting responsive Technical Proposals.

4.22.63 If a Technical Proposal is not responsive to the Bidding Document, it shall be rejected by the Purchaser and shall not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.

4.22.64 Non conformities, Errors, and Omissions :

Provided that a Technical Proposal is responsive, the Purchaser may waive any non-conformity or omission in the Bid that does not constitute a material deviation.

Provided that a Technical Proposal is responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial, nonconformities or omissions in the Technical Proposal related to documentation requirements. Such omission shall not be related to any aspect of the Price Proposal of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

Provided that a Technical Proposal is responsive, the Purchaser will rectify nonmaterial nonconformities or omissions. To this effect, the Bid Price shall be adjusted during evaluation of Price Proposals, for comparison purposes only, to reflect the price of the missing or non-conforming item or component.

Provided that the Technical Proposal is responsive, the Purchaser will correct arithmetical errors during evaluation of Price Proposals if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;

4.22.65 Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids

4.22.66 The Purchaser reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to Contract award, without thereby incurring any liability to the Bidders.

Purchaser's Right to Vary Quantities at Time of Award

At the time the Contract is awarded, the quantity of Goods and Related Services for a town shall not be modified. However Purchaser reserves the right to increase or decrease the number of sub-divisions, number of consumers under the contract subject to the limit of 30% of the existing number of towns covered under the contract, without any change in the unit prices or other terms and conditions of the Bid and the Bidding Document.

4.22.67 Notification of Award

Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted. Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.

4.22.68 Signing of Contract

The procurement contract shall come into force from the date on which the letter of acceptance or letter of intent is despatched to the bidder. The successful bidder shall sign the procurement contract within a period specified in the bidding document or where the period is not specified in the bidding document then within fourteen days from the date on which the letter of acceptance or letter of intent is despatched to the successful bidder. If the bidder, whose bid has been accepted, fails to sign a written procurement contract or fails to furnish the required performance security within specified period, the procuring entity shall take action against the successful bidder as per the provisions of the Act and these rules. The procuring entity may, in such case, cancel the procurement process or if it deems fit, offer for acceptance the rates of lowest or most advantageous bidder to the next lowest or most advantageous bidder, in accordance with the criteria and procedures set out in the bidding documents. The bidder shall be asked to execute the agreement on a nonjudicial stamp of specified value at the cost of the successful bidder.

4.22.69 **Local Conditions** : The successful Bidder shall provide an undertaking that the key staff identified for the project (as submitted in its bid proposal) shall be available for the respective proposed work requirement, anytime during the duration of the project, till its successful completion. It will be imperative on each bidder to fully inform himself of all local conditions and factors which may have any effect on the execution of the works covered under these documents and specifications. The purchaser shall not entertain any request for clarifications from the bidders, regarding such local conditions. It must be understood and agreed that such factors have properly been investigated and considered while submitting the proposals. No claim for financial adjustment to the contract awarded under these specifications and documents will be entertained by the purchaser. Neither any change in the time schedule of the contract nor any financial adjustments arising thereof shall be permitted by the purchaser, which are based on the lack of such clear information or its effect on cost of the works to the bidder.

4.22.70 **Interpretation of the RFP document** :This Bid Document, inclusive of Schedules, annexure(s), the statements, exhibits and sections, if any, comprises the whole and complete Document. No claim of any nature whatsoever shall be entertained in this regard.

Note:.

1. ***The illustrative work and requirements during the tenure of the contract for meeting business requirement of the systems shall be provided by the bidder.***
2. ***The contractor shall ensure and maintain required security level of RMS system comprising of all the supplied hardware and software application suite, for which cyber security audit shall be mandatorily carried out every year by EMPANELLED INFORMATION SECURITY AUDITING ORGANISATIONS by CERT-In of Government of India at the cost of successful bidder.***
3. ***However cyber security audit of the data base and State DC/DR shall be the responsibility of the State DC/DR and DC and DR shall be fully secured and duly protected from the cyber-attacks.***

SECTION 5

5 TERMS AND CONDITIONS

The Terms and Conditions of the contract shall prevail and shall be binding on the Agency and any change or variation expressed or impressed howsoever made shall be in operative unless expressly sanction by the Jodhpur Discom. The Bidder shall be deemed to have fully informed himself and to have specific knowledge of the provisions under terms and Conditions of this Tender Document mentioned hereunder:

5.1 DEFINITION OF TERMS:

- 5.1.1 In constructing these general conditions and the annexed specification, the following words shall have the meaning here in assigned to them unless there is anything in the subject of context in consistent with such construction. "Jodhpur Discom" shall mean the Jodhpur Vidyut Vitran Nigam Limited or JODHPUR DISCOM represented by Chairman/Managing Director and shall include their legal personal representative, successors and assignees.
- 5.1.2 The "Bidder" shall mean and include one or more persons or any firm or any company or body in corporate who has submitted the tender in response to "Invitation of Tender".
- 5.1.3 The "Agency / Contractor / successful bidder " shall mean the Bidder whose Bid has been accepted by Jodhpur Discom and shall include its heirs, legal representative, successors and assignees approved by the Jodhpur Discom.
- 5.1.4 The "Chairman/Managing Director" shall mean the Chairman/Managing Director, Discom.
- 5.1.5 The "Engineer" shall mean the Chief Engineer, Addl. Chief Engineer, Superintending Engineer, Executive Engineer, Assistant Engineer, Jodhpur Discom or other Engineer or Officer for the time being or from time to time duly authorized and appointed in writing by the customer to act as engineer or Inspector for the purpose of the contract. In case where no such engineer has been so appointed, the word "Engineer" shall mean the Discom or his duly authorized representative.
- 5.1.6 "Works" mean and include the work or works to be done by the Agency under the contract.
- 5.1.7 The "Contract" shall mean and include the following:
 - (i) Notice Inviting Tender
 - (ii) Complete Tender document including its amendments if any.
 - (iii) Bid submitted by bidder.
 - (iv) EMD/ Bid Security Declaration.
 - (v) Letter of Intent and its acknowledgement.

- (vi) Security Deposit/ Performance Guarantees.
 - (vii) Detailed Work order.
 - (viii) Addenda that may hereafter be issued by the Discom to the Agency in the form of letter and covering letters and schedule of prices as agreed between the Agency and the Discom.
 - (ix) The agreements to be entered as per Tender Document.
 - (x) Requisite Power of Attorney in favour of the authorized signatory of the Bidder.
 - (xi) Service Level Agreement
- 5.1.8 The "Specification" shall mean the specification; specific conditions annexed to the General Conditions, the contract schedule, and the annexure thereto, if any.
- 5.1.9 The Month shall mean, English calendar month i.e. period of 30 days and week shall mean a period of 7 days.
- 5.1.10 The "Site" shall mean the place or places named in the contract and include, where applicable, the lands and buildings upon or in which the works are to be executed.
- 5.1.11 "Acknowledgement of Letter of Intent" shall mean the Bidder's letter conveying his acceptance of it being successful bidder and its intent to perform the contract.
- 5.1.12 "Acknowledgement of Work Order" shall mean the Bidder's letter conveying his acceptance of the tender as per the terms and conditions as been stated therein.
- 5.1.13 The "Contract Price shall mean the sum named in or calculated in accordance with the provisions of the contract purchase or any amendments thereto.
- 5.1.14 "Letter of Intent" Letter issued by Discom to the successful bidder informing him that the bidder is successful bidder.
- 5.1.15 "Work Order" shall mean the Discom' letter which may be issued in the way of letter containing detailed terms and conditions of the work and such other particulars which the Discom may like to convey to the Agency pending signing of a formal written Contract.
- 5.1.16 "Writing" shall include any manuscript type written or printed statement under or over signature or seal as the case may be.
- 5.1.17 The Work "Codes" shall mean the Indian Electricity Act/Electricity Supply act and Indian Electricity Rules and the rules made there under applicable in the State of Rajasthan on the date of Letter of Intent with such special modification thereof as may be specially stipulated by competent State Authorities i.e. Chief Electrical Inspector of Rajasthan.
- 5.1.18 Works importing "PERSON" shall include firms, Companies, Corporations and other bodies whether incorporated or not.

5.1.19 Words importing the singular only shall also include the plural and vice version where the context requires.

5.1.20 Terms and expressions not herein defined shall have the same meaning as one assigned to them in the Indian Contract Act (Act IX of 1872) and falling that in the General Clause Act, 1897).

5.2 CONTRACT:

After the selection of successful bidder Discom will issue Letter of Intent and subsequently a detailed Work Order to such bidder. A contract shall be entered into between Discom and the successful bidder.

5.3 CONTRACT VALUE:

Contract Value shall be termed as total order value as quoted / accepted by the Successful Bidder in the Financial Bid.

5.4 CONTRACT PERIOD

The contract period shall be 3 years, which can be further extendable on same rates for one year (subject to consent of both parties).

5.5 IMPLEMENTATION PERIOD:

The implementation period of project shall be 3 months from date of issuance of letter of award as defined in this document where in all the hardware, software, resources etc. should be installed/deployed.

5.6 TERMINATION OF CONTRACT

5.6.A If the services of the vendor are not as per the awarded work for three consecutive months after commencement of work then Discom will have liberty to terminate the contract with levy of penalty and other suitable action as per GCC.

5.6.B The Source Code(customised for DISCOM), all the hardware and software shall be transferred to Jodhpur Discom at the time of the closure or termination of the Project. It shall be the responsibility of the bidder to migrate all the business database to new system as desired by the Discom, only then the bank guarantee shall be released and contract shall be closed.

5.7 FALL BACK ARRANGEMENT

5.7.A In the event of failure of the Agency to fulfil its obligations, duties and responsibilities as per the terms & conditions of the Contract, Discom shall interalia have the right, at any time to resort to fall back arrangement. Under such arrangement, Discom shall take charge of all facilities and systems whether in operation or under execution after giving suitable notice as provided in the Contract and can recover from the BGs & other holding of

agency with Discom, the losses suffered due to such failure. If the BGs & other holding of agency are insufficient, the Agency shall pay the difference to Discom failing which Discom shall have right to recover the sum through legal or other means.

5.7.B The Discom shall have the right in such circumstances to manage the system itself after taking charge of the facilities as above or through any other agency as it may deem fit and no claim of Agency for compensation in this respect shall be entered.

5.7.C The Discom shall have the right in such circumstances to blacklist/debar/disqualify the Agency from submission of Bid to the any Discom(s) at least for one year.

5.7.D The Bidder should be qualified, not be insolvent, not be in receivership, not be bankrupt or being wound up, should not have affairs administered by a court or a judicial officer, should not have business activities suspended, should not be blacklisted or debarred by any utility/ government agency, should not have a conflict of interest.

5.8 HANDING OVER ON TERMINATION/ PROJECT COMPLETION:

5.8.A The Contract shall require the Agency to cooperate in handing back the facilities, records, data backup and documents, latest software with documentations, manuals, etc. in good working order to Discom before termination of Contract / completion of project.

5.8.B Upon termination of the Contract, the Agency's authority to act in the area shall immediately cease. In order to smoothen the handing over process and not hampering the work, Discom shall arrange to award the Contract to other firm or may execute the work departmentally at-least 6 months before expiry of this Contract, the Agency/Discom staff may require to work along with the new agency for remaining period of Contract to enable the new agency to understand the process.

5.8.C Upon Termination of the Contract, following equipment / items shall be handed over by agency to the Discom in working condition:

- (i) All the Jodhpur Discom Specific Data including Archives.
- (ii) All the hardware including Desktop PCs , UPS and Printers, Servers.
- (iii) Android based Spot Billing Devices (Android Based Smart Phone and Bluetooth Printer).
- (iv) QR code reader & scanner and Biometric Device.
- (v) LAN with allied equipment.
- (vi) COTS software and Database(All Licenses cost / AMC cost as on date of Transfer shall be paid by the agency)
- (vii) Transfer the Source Code (customised for DISCOM) and Software for Non-COTS Software and database.

- (viii) The Source Code (customised for DISCOM), all the hardware and software alongwith licenses shall be transferred and handed over to the Jodhpur Discom at the time of the closure or termination of the Project. It shall be the responsibility of the bidder to migrate all the business database to new system as desired by the Discom, only then the bank guarantee shall be released and contract shall be closed.

5.9 PERFORMANCE BANK GUARANTEE:

Performance Bank Guarantee shall be as follows:-

- (a) 3% of the amount of work order.
- (b) 0.5% of the amount of quantity ordered for supply of goods, in case of Small Scale Industries of Rajasthan; and
- (c) 1% of the amount of supply order, in case of sick industries, other than Small Scale Industries, whose cases are pending before the Board of Industrial and Financial Reconstruction (BIFR)

Provided that during the period commencing from the date of commencement of the Rajasthan Transparency in public procurement (Second Amendment) Rules, 2020 to 31.12.2021, in case of procurement of works, the successful bidder at the time of signing of the contract agreement, may submit option for deduction of performance security from his running and final bill @ 3% of the amount of the bill.

The PBG shall be provided by the Successful Bidder within 14 days of receipt of Work Order from Discom, in any of the following forms:

- (a) Deposit through eGRAS;
- (b) Bank Draft or Banker's Cheque of a scheduled bank;
- (c) National Savings Certificates and any other script/instrument under National Savings Schemes for promotion of small savings issued by a Post Office in Rajasthan, if the same can be pledged under the relevant rules. They shall be accepted at their surrender value at the time of bid and formally transferred in the name of JODHPUR DISCOM with the approval of Head Post Master;
- (d) Bank guarantee/s of a Nationalised / Scheduled bank. It shall be got verified from the issuing bank. The BG should have an initial validity period of 12 months (18 months including grace period). Upon successful performance, the agency shall be allowed to submit fresh revolving PBG as per applicability, of annual contract value for a further duration of 12 months (18 months including grace period). This Performance Bank Guarantee shall be valid for six months in addition to the entire contract period. It would be the sole responsibility of the

Successful Bidder to get the Performance Bank Guarantee extended well in advance to maintain the validity time. Discom may invoke the Performance Bank Guarantee without giving any information if validity of such Performance Security expires.

- (e) Fixed Deposit Receipt (FDR) of a Nationalised / scheduled bank. It shall be in the name of JODHPUR DISCOM on account of bidder and discharged by the bidder in advance. The JODHPUR DISCOM shall ensure before accepting the Fixed Deposit Receipt that the bidder furnishes an undertaking from the bank to make payment/ premature payment of the Fixed Deposit Receipt on demand to JODHPUR DISCOM without requirement of consent of the bidder concerned. In the event of forfeiture of the performance security, the Fixed Deposit shall be forfeited along with interest earned on such Fixed Deposit.
- (f) Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the next successful Bidder whose offer is responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily

5.10 AGENCY TO INFORM HIMSELF FULLY

The Contract shall be considered to have come into force from the date of its signing. The contractor shall be deemed to have carefully examined the Tender document including General Conditions, specifications and schedules. Also, it shall be deemed to have satisfied himself with the nature and character of the work to be executed and where necessary, of the site conditions and other relevant matters and details. Any information thus had or otherwise obtained from the Discom or the Engineer shall not in any way relieve the contractor from his responsibility for the supplying of the hardware, software and other equipment and executing the work in terms of the contract including all details and incidental works and supply all accessories or apparatus which may not have been specifically mentioned in the contract but necessary for ensuring complete erection and safe and efficient working of the equipment.

5.11 CONTRACT DOCUMENTS

5.11.A The order placed under this Tender document shall be governed by the terms and conditions as incorporated in this Tender document and as given in the detailed work order. The terms and conditions as specified in this Tender document if differ from the terms indicated in the detailed work order the later shall prevail.

5.11.B The contract shall for all purposes be construed according to the Laws of India and subject to jurisdiction of Jodhpur (Rajasthan) Courts only. For the due fulfilment of the contract, the Agency shall execute the Contract in

the prescribed form, in prescribed number of copies on Rajasthan State Non-judicial stamp paper bearing stamp duty as applicable. The expenses of completing and stamping the Contract shall be borne by the Contractor. Such Contract shall be executed and signed by the authorized signatory of the Agency on each page thereof.

5.11.C Such complete agreement form along with the contract documents together with a "Power of Attorney" in favour of the Executants shall be required to be returned to the Discom within a period of 14 days from the receipt of order duly signed on each page. One copy of the executed agreement duly signed by the Discom shall be sent to the supplier for his reference.

5.11.D **The contract documents shall mean and include the following: -**

- (i) Contract agreement.
- (ii) Notice Inviting Tender
- (iii) Complete Tender document including its amendments if any.
- (iv) Bid submitted by bidder.
- (v) EMD/ Bid Security Declaration.
- (vi) Letter of Intent and its acknowledgement.
- (vii) Security Deposit/ Performance Guarantees.
- (viii) Detailed Work order& its annexure.
- (ix) Addenda that may hereafter be issued by the Discom to the Agency in the form of letter and covering letters and schedule of prices as agreed between the Agency and the Discom.
- (x) The agreements to be entered as per Tender Document.
- (xi) Requisite Power of Attorney in favour of the authorized signatory of the Bidder.
- (xii) Service Level Agreement.

5.12 CHANGE OF QUANTITY/AREA

5.12.A Change of Area:

- i. This tender is meant for entire Jodhpur Discom area.
- ii. If some / any area is added in the scope all the hardware software and services shall be rendered at par with this specification.
- iii. The payment shall be given on the contract price for additional consumers on account of such addition.

5.12.B Change of Quantity

- i. The quantity of consumers may increase in this contract due to natural growth of consumer base / transfer of area to Discom / any other reason.

- ii. The quantity of consumers may even decrease due any reason like Distribution Franchisee / MBC model / any other reason.
- iii. The restriction for limit of repeat order to be placed upon the agency is maximum upto 50% of original contract value which includes limit of 5% for extra item values as per RTPP Rule 73(2)

5.12.C In any case, payment shall be made on actual consumer numbers in the data base(excluding PDC consumers) as per the MIS report.

5.12.D Since this is service contract, in case of addition of consumers/change in area, it shall not be considered as additional order.

5.13 GIFTS AND COMMISSIONS ETC.

Any gift, commission, or advantage given, promised or offered by or on behalf of the contractor or his partner, agent, officers, director, employee or servant or any one on his or their behalf in relation to the obtaining or to the execution of this or any other contract with the Discom, shall be, in addition to any criminal liability which it may incur, subject of any loss or 2.5he Discom resulting from any cancellation. The Discom shall then be entitled to deduct the amount so payable from any moneys otherwise due to the Agency under the contract.

5.14 COMPLIANCE OF LABOUR LEGISLATION:

5.14.AThe Agency shall discharge its liability of employer in respect of personnel to be engaged for delivering service under this Contract, as laid out in EPF and MP Act, 1952 ESI Act, 1948 (in ESI implemented area), workmen's compensation act, 1923 (in non ESI implemented area) contract labour (R&A) Act, 1970, Payment of Wages Act, 1936, Minimum Wags Act, 1948 or any other Act, Rules, Regulations as may be applicable. The Agency is required to get separate code under the provision of EPF and ESI Acts, if not already taken and deposit the employer's contribution along with employee subscription, as per rule and submit copy of challans at the time of claiming payment, as per Tender document, failing which an amount equivalent to employer's contribution and employees subscription shall be deducted from his each bill and deposited with the concerned authorities. The Agency shall be solely responsible for any consequences arising out of breach of any applicable legislations.

5.14.B The Agency shall deploy Skilled / Highly Skilled manpower with necessary qualifications and experience as mentioned in the Tender Document. Agency shall pay salaries / wages to the manpower deployed through cheque/online transfer and submit Circle wise, Division wise Sub Division wise and Employee wise salary statement with all details such as Basic, DA,

Conveyance, Bonus, EPF, ESI, PT, TDS, Net Salary etc. to Discom. Payment of wages / salaries paid in cash is strictly not allowed.

- 5.14.C Accounts Officer of respective circle shall ensure compliance by the Agency with respect to labour law, minimum wages, Accidental Insurance, Workman compensation, EPF and ESI etc. Accounts Officer shall verify and certify the monthly Circle wise, Division wise Sub Division wise and Employee wise salary statement for release of payments to Contractor.

5.15 SAFETY OF SYSTEM

The Agency shall be fully responsible for upkeep, operation, maintenance, security and safety of hardware, software, documents, data and other documents and records transferred to it and developed later. These documents and records shall be maintained in updated condition and handed over back to Discom in good working order on completion of the contract or time to time basis as per scope of works as and when required by the Discom. Agency shall compensate to Discom any loss suffered by Discom due to default of the agency in this respect.

5.16 INSURANCE

The agency at his own cost shall arrange, secure and maintain all insurance (Equipment, system data & manpower) as pertinent to the works and obligatory in terms of law to protect its interest and interest of Discom against all perils. The validity of insurance shall be valid till expiry of contract.

5.17 REMEDY ON AGENCY'S FAILURE TO INSURANCE

If the Agency fails to effect and keep in force insurance referred to in clause 4.16 hereof or any other insurance which he may be required to effect under the terms of contract then the Jodhpur Discom may effect and keep in force any such insurance and pay such premium(s) as may be necessary for that purpose and from time to time deduct the amount so paid by the Discom as aforesaid from any money due or which may become due to the Agency or recover the same as debt from the Agency.

5.18 LIABILITY FOR ACCIDENTS AND DAMAGES

- 5.18.A The Agency shall be liable for and shall indemnify the Discom in respect of all injury to person or damage to property resulting from the negligence of the Agency or his workman or from defective work but not from any other cause.
- 5.18.B Provided that the Agency shall not be liable for any loss or profit or loss of Contract or any other claim made against the Discom not already provided for in the contract, not for any injury or damage caused by or arising from the acts of the DISCOM or of any other person or due to

circumstances over which the agency has no control, not shall his total liability for loss, damage or injury under this clause exceed the total value of the Contract.

5.18.C The Agency will indemnify and save harmless the Discom against all actions, suits, claims, demands, costs, or expenses arising in connection with injuries (other than such as may be attributable to the Discom or his employees) suffered prior to the date when the work shall have been taken over hereof by persons employed by the agency on the work, whether at common law or under the workman's compensation Act-1923 or any other statute in force at the date of contract relating to the question of the liability of employees for injuries suffered by employees and will if called upon to do so take out the necessary policy or policies of insurances to over such indemnity.

5.18.D The Agency shall insure against such liabilities with an insurer approved by the Discom and shall continue such insurance, during the whole of the time that any person(s) are employed by him on the works and shall when required produce to the Discom, such policy of insurance and the receipt for payment of the current premium.

5.19 MAINTENANCE OF FACILITIES AND PERSONNEL

5.19.A The Agency shall maintain all requisite facilities at Jodhpur of its own as required to carry out the work as per the Tender document.

5.19.B Facilities:

- (i) The Agency shall provide and maintain a controlling office with requisite infrastructure at Discoms office with proper staff & facilities like computers, printers, tele Device with fax, mobile Device, Internet etc. at its own cost and shall remain open at all reasonable hours to receive communications.
- (ii) Space, Electricity, Water and other facilities at all concerned offices of DISCOM shall be provided by JODHPUR DISCOM without any cost chargeable to Agency.
- (iii) The agency shall arrange at its own, requisite infrastructure at Discoms offices for manpower deployed like computers, printers, tele Device with fax, mobile Device, Internet etc. at its own cost

5.19.C Personnel

- (i) The Agency shall deploy exclusive supervisory and other personnel for efficient management of the work under contract. Apart from the personnel specified in the scope of work. However, this contract is on service model, Agency shall be responsible for smooth & timely execution of work by appointing sufficient number of manpower.

- (ii) Manager or an alternate shall be available for communication during 9 AM to 6PM.
- (iii) Agency shall not change the Manager/nodal officer, provide that he has not left the service.
- (iv) Agency shall immediately inform the Discom about any change of personnel/contact numbers through Email and post.
- (v) Agency shall issue identification cards (ID card) to all its personnel engaged in the work under the contract. The identification card duly signed by authorized signatory of managerial position of the agency. The format of such ID card shall be approved by concerned Discom Officer shall be consisting of key details of Resume and photograph of the concerned personnel along logo of the Agency. The Concerned Discom officer after countersigning these IDs, will return the same to the Agency for distribution to the concerned personnel. The IDs shall be handed over to the concerned Discom officer after the completion of work under the contract.

5.19.D Nodal Officer for Execution of Project: After award of contract, to interact between the field offices and Agency, Discom shall appoint a Nodal Officer if required. Similarly, the Agency shall communicate the name of the authorized person(s) that would act as a Nodal Officer(s) from his side.

5.20 AGENCY'S RIGHTS

- 5.20.A** The Agency will be given rights to operate in the area during the Contract period for carrying out the work, which shall cease to exist on completion of the said period or on termination of the Contract.
- 5.20.B** The Agency's rights in the area will be working as an agent of Discom to implement the Revenue Management System on TOTEX (CAPEX+OPEX) mode.

5.21 CONTRACT AGREEMENT

- 5.21.A** The Contract shall set out specific events of default by one party that will entitle the other party to terminate the Contract. The party committing an event of default, which is capable of being remedied, will be given a reasonable opportunity to remedy the default.
- 5.21.B** The Contract can however be otherwise terminated by either party by giving six-month notice and on terms to be mutually agreed which may

include payment of suitable compensation for losses suffered by the other party due to such termination.

- 5.21.C Agency shall indemnify Discom against any claims, demands, costs and expenses whatsoever which may be made against it, because of failure of the Agency or its representatives in the performance of their duties and negligence, any accident or injury to any person.

5.22 MODE AND TERMS OF PAYMENT

1. The payment against the CAPEX shall be released after the SE (IT), Jodhpur Discom certifying the receipt of all license/ agreement's other relevant documents of all COTS / in-house software and acceptance of hardware, software and fulfilment of various requirements envisaged in this specification and LoA. However, the notification shall be issued by SE (IT), JODHPUR DISCOM, Jodhpur after ascertaining the deliveries. *(Software modules, functionalities for which delay is at DISCOM end or at the end of other IT systems e.g. RFMS, AML, AMR under IPDS, delay in furnishing process flow for any module or functionality etc. shall be exempted for releasing payment.)*
2. The payment against the CAPEX shall be released as follows after the certification by the SE(IT) as per Sr. No. 1 above:

The payment of the CAPEX amount of work order shall be released against receipt and acceptance of material at circle stores as per inspection report and DI.

- (a) 90% payment of the CAPEX amount of work order shall be released after installation and commissioning of the Hardware and Go-live & successful implementation and roll out of billing in entire Discom area on new RMS.
 - (b) Remaining 10% of the CAPEX amount of work order shall be released after successful implementation/ completion of six Billing cycles.
3. The payment against OPEX shall be started from the date of declaration of Go-Live by the SE (IT), Jodhpur DisCom, Jodhpur. The payment will be made for providing all Services as per governing Specifications per regular consumer in the database for that particular month.
 4. The agency shall submit monthly invoice in triplicate for OPEX charges to the Superintending Engineer (IT), Jodhpur DisCom, Jodhpur as per the rates indicated in the Contract. Invoice shall be verified by SE (IT), Jodhpur DisCom, Jodhpur and forwarded to Sr. AO (CPC), Jodhpur DisCom, Jodhpur

for making payment. The payment after deduction of applicable penalties shall be released to the Agency from Sr.AO (CPC), Jodhpur DisCom, Jodhpur.

- a) The Payment shall be made as per the Number of Regular Consumers in Database verified from Monthly MIS. No payment shall be admissible for maintaining PDC consumers in the Database & related reporting.
- b) The invoice shall be submitted by 7th day of every month upon finalization of the MIS.
- c) The SE (IT) concerned shall verify the invoice by 15th day of every month and send the same to Sr. AO (CPC), Jodhpur DisCom, Jodhpur.
- d) The Sr.AO (CPC), Jodhpur DisCom, Jodhpur shall release the Payment within 30 days.

The invoice shall be accompanied by the following:

- (i) Employee wise monthly wages statement.
- (ii) EPF statements and challan.
- (iii) ESI statements and challan
- (iv) Certifying 100% amount to be released.

Price Variation: -

The price variation shall be computed as per below formula on 1st of April month (after the award of contract) and the price so derived shall be applicable for ensuing months only. The Agency shall have to submit relevant documents to calculate extent of price variation.

The price variation shall be applicable on the unit rates mentioned in the Contract. The percentage increase/decrease (rounded off up to two decimal) in price shall be worked out as under:

B1= Rate of skilled labour per day as on date of Bid opening month, as published by the Govt. of Rajasthan for minimum wages to Labour per days, as per Act 1948.

B2=Rate of skilled labour as published by Govt. of Rajasthan as on first day of April month for which price variation is to be allowed to the bidder.

Formula: **$PV = 0.20 \times ((B2-B1) / B1) \times 100$** (where manpower component is considered as 20% of the total cost per consumer.

5.23 PENALTIES

The purchaser reserves the right to defer the delivery/ execution period as indicated in the RfP. The period during which the work(s) have been so deferred shall not be reckoned as delay in delivery / execution in terms of clause delay in delivery.

Delay in execution of works

In case of delay in execution of works beyond stipulated period, the following recovery/ penalty action shall be applicable

- i. Recovery shall be done from the agency for delay in delivery / execution @ ½ % (half percent) per week or part thereof of the total contract value as per implementation schedule subject to maximum of 10% of total contract value.
- ii. The adjustment in regard to the amount recoverable, if any, in terms of delay in execution of works shall be made from the cash deposits/ dues of the firm or by operating the Bank Guarantees as may be available with the Nigam.

Penal Provision for non execution of contract/ works:-

AS per RTPP Act 2012 clause 42(2) A bidder who:-

- (a) Withdraws from the procurement process after opening of financial bids.
- (b) Withdraws from the procurement process after being declared the successful bidder.
- (c) Fails to enter into procurement contract after being declared the successful bidder.

Fails to provide performance security or any other document or security required in terms of the bidding documents after being declared the successful bidder, without valid grounds, shall, in addition to the recourse available in the bidding documents or the contract, be punished with fine which may extend to fifty Lakh rupees or ten per cent of the assessed value of procurement, whichever is less.

RTPP provisions relating to debarment

- i. If a procuring entity finds that a bidder has breached the code of integrity prescribed in terms of section 11, it may debar the bidder for a period not exceeding three years.
- ii. Where the entire bid security or the entire performance security or any substitute thereof, as the case may be, of a bidder has been forfeited by a procuring entity in respect of any procurement process of procurement contract, the bidder may be debarred from participating in any procurement process undertaken by the procuring entity for a period not exceeding three years.
- iii. The State Government or a procuring entity, as the case may be, shall not debar a bidder under this section unless such bidder has been given a reasonable opportunity of being heard.

Breach of code of integrity by the bidder

Without prejudice to the provisions of Chapter IV of the Act 2013, in case of breach of any provisions of the code of integrity by a bidder or prospective bidder, as the case may be, the procuring entity may take appropriate action in accordance with the provisions of subsection (3) of section 11 and section 46.

Further, **Additional Penalty on account of default of Services shall be levied as follows:**

S N	Activity	Penalty
1	Penalty for not maintaining the minimum inventory of Android based Smart Mobile phone with communication cable for meter reading, Bluetooth Mobile printer, Power Bank, Accessories etc., GPRS (4G or better) SIMs with necessary Data Packs.	A penalty of Rs.100 per Android based Smart Mobile phone with communication cable for meter reading, Bluetooth Mobile printer, Power Bank, Accessories etc., GPRS (4G or better) SIMs with necessary Data Packs per day and part thereof shall be levied on the deficient quantity of machines.
2	Non-generation of bills due to the deficiency of service by the service provider (Including Android based Smart Mobile phone with communication cable for meter reading, Bluetooth Mobile printer, Power Bank, Accessories etc., GPRS (4G or better) SIMs problems, stationery, Connectivity, software etc.)	Equal the Contract unit Price awarded per bill of non generated bills, if delayed by more than 3 days from scheduled date.
3	Non rectification/ Problems in Re-customization of Software due to change in tariff or any other reason which needs change / rectification of the software	½ % (half percent)per week or part thereof on the monthly remuneration bill.
4	Non-availability of supporting manpower of Agency	One day leave shall be allowed per person per month, thereafter Rs.500/day/person shall be applicable.
5	Generation of wrong/absurd bill due to erratic behaviour of software	Rs.100/- per wrong/ absurd bill

Service Level Agreement

Bidder is expected to establish a helpdesk tool where DISCOM users can register their problems in the tool under various category like

Support Category	Criteria	Maximum Response	Maximum Resolution
Critical	The system is unable to be used for normal business activities. There is certainty of financial loss to PURCHASER.	30 Minutes	240 Minutes
High	There is a problem with a part of the system, which impacts on purchaser's decision making. No viable workaround is available. There is a likelihood of financial loss	1 Hour	8 Hours

Medium	The efficiency of users is being impacted but has a viable workaround.	2 Hours	24 Hours
Low	A fault, which has no particular impact on processing of normal business activities.	8 Hours	48 Hours
Note:	<ul style="list-style-type: none"> Financial loss means inability to bill or collect revenue from the system All hours are Working hour except for Critical Event. 		

Service Level Agreement Penalty

Sr. No.	Parameter	Measurement	Penalty
1	RMS Software Availability	Uptime *	<ul style="list-style-type: none"> 99.9% - No Penalty 99.0 to 99.9% - 2% of Monthly Invoice Value 96 to 99% - 3% of Monthly Invoice value Below 96% - maximum 10% of Monthly Invoice value
2	Helpdesk	Resolution of ticket logged as per the Service Availability & Criticality Chart	<ul style="list-style-type: none"> >99% of ticket resolved – No Penalty If >95% but <=99% calls resolved in the given Month - 1% of the Monthly Invoice Value If >90% but <=95% calls resolved in the given Month - 3% of the Monthly Invoice value If below 90% calls resolved in the given Month - 5% of the Monthly Invoice value
3	Change Management	Any Modification / Enhancement / Change suggested by DISCOM and agreed implementation schedule	Beyond schedule Rs 1000.00 penalty per day
4	Offered Hardware at Site	Replacement / Repair of Hardware after reporting to agency	Beyond 2 working days after reporting Rs 1000 penalty per day.

*** % Monthly Availability = [(Actual Uptime + Scheduled Downtime) / Total No. of Hours in a Month] x 100} excluding the DC/Dr related outages/interruptions which are no attributed to the successful bidder.**

Note: -

- 1) The Cumulative penalty shall not be higher than 10% of monthly invoice of each sub division
- 2) To avoid anomalies in working of penalties, vendor shall develop an IT Tool for auto-compilation of the penalties. Such tool shall be verified / approved by the Discom.

5.24 IMPLEMENTATION AND ROLLOUT SCHEDULE

The Agency has to submit the plan for customization and rollout of the activities defined in the scope of work and as per the terms and conditions mentioned in this RfP in various sections.

Penalty will be levied for delay in execution and rollout as per the Penalties given in this Tender document. Time is the essence of the contract and hence the scope of work has to be completed within stipulated time period.

The complete solution comprising of all application software modules, hardware and mobile application as envisaged in the RfP as per scope of work shall be deployed as per following implementation schedule:

SN	PARTICULAR OF ACTIVITY	TIME SCHEDULE DESIRED
1	Submission of Inception Report, detailed functional design specification & data sheet of all the software, hardware etc. under the scope of the Agency along with MIS Dashboards, report formats for approval from Discom	Within 30 days from the date of awarding contract (detailed work order). <i>** If not furnished within 45 days, the order may be cancelled.</i>
2	Approval/ comments by Discoms designated committee(s).	Within 14 days from the date of submission of point 2 above.
3	Offering complete solution by agency comprising of all application software modules, mobile application and hardware as envisaged in the RfP as per scope of work for testing / validation by DISCOM	Within 60 days from date of issuance of letter of award. <i>** If not offered within 60 days order may be cancelled</i>
4	Testing/ Validation of the system and approval/ comments by Discoms designated committee(s).	Within 14 days after activity as per point No. 3 above
5	Rectification/Incorporation of discrepancies/ gap observed by designated committee(s)	Within 30 days after activity as per point no. 4 above
6	Reoffer the complete solution by the agency comprising of all application software modules, mobile application and hardware as envisaged in the RfP as per scope of work for testing / validation to DISCOM	Immediate after completion of activity as per point no. 5 above
7	Re-testing/re-validation of the system and approval /comments by Discoms designated committee(s)	Within 7 days after activity as per point no. 6 above
8	Deployment/ Roll Out and Go-live	Within 90 days from issuance of

SN	PARTICULAR OF ACTIVITY	TIME SCHEDULE DESIRED
	of Approved application software solution for each of the entire Discoms and Functional operation of the system	the latter of award
9	Data Migration by agency in each Discom as per Data Format finalised & decided by Discom.	Within 90 days from issuance of the letter of award

The commercial and other available data required shall be obtained by the agency from DISCOM for migration. The payment shall start from the date of declaration of Go-Live.

5.25 Other conditions:

- a) The Implementation Agency shall supply, the complete backup of data on monthly basis in predefined (SQL) form along with required software to incorporate / read the data in soft copy in external hard Disk, and modifications incorporated during the year shall also be provided in hard copy on yearly basis.
- b) The Implementation Agency shall be responsible for proper storage of data of last 3 years active data and 5 year archived data on dedicated secured storage device used for bill processing of the JODHPUR DISCOM and ensure proper care of data stored therein from being erased or mutilated / destroyed through in-advertence or fire or any hazard and will indemnify the JODHPUR DISCOM for the above data held in their charge from damages or destructions or loss due to any reason what-so-ever. Storage charges, insurance cover charges etc. for safe custody of data shall be borne by the agency, or as decided by the Nigam.
- c) Incorporation of the entire rules / tariff as amended from time to time for billing or which may affect the billing is to be incorporated/ adopted by the Implementation Agency free of cost immediately even if it requires insertion / deletion / modification of any field or the format of the field and modified / new report, which may be generated due to this modification or insertion / deletion, is to be generated by the Implementation Agency at no extra charges and reporting confirmation thereof within 48 hours of receipt of such instructions from the Jodhpur Discom. All monthly Backup Data along with output reports in operational mode with defined fields / predefined format (SQL Form) in uncompressed mode is also to be supplied by the Implementation Agency on external hard Disk free of cost to the designated officer once in a month.
- d) The Implementation Agency shall have alternate arrangements to continue to execute the work in case of breakdown of their own system. The bidder shall clarify the modality for alternate arrangement in the tender offer.

5.26 SETTLEMENT OF DISPUTES

In any time any question, dispute or difference what so ever which may arise between Jodhpur Discom and the Implementing Agency, the same shall be decided by the Managing Director, Jodhpur Discom, or by the settlement committee constituted by him and shall be final and binding on both the parties.

The Jodhpur Discom has constituted settlement committee to settle the disputed cases. For the disputed amount up to Rs. 3.00 Lac the case may be referred to the CE level settlement committee and if the disputed amount is more than Rs. 3.00 Lac the case shall be referred to the corporate level settlement committee. The non-refundable fees for referring the case to the settlement committee are as given below or prescribed time to time:

- i. Reference fee for CE level settlement committee - Rs. 1000/-
- ii. Reference fee for corporate level settlement committee-Rs. 3000/-
- iii. Fee for review of cases by corporate level settlement committee- Rs. 5000/-

The settlement committee fees as shown above or prevailing at that time shall be deposited in cash with the Sr. Accounts Officer (EA/Cash/CPC), JDVVNL, Jodhpur.

6 TECHNICAL PROPOSAL SUBMISSION SHEETS

Section 1. TECHNICAL PROPOSAL SUBMISSION SHEETS

Technical offer to be furnished by the bidder on its letter head and each page signed & sealed by the authorised signatory

- **An affidavit indicating that all the information, affirmation made in this proposal shall be complied with.**
- **The Technical offer shall be given strictly in same sequence of order as given in this document.**

**To,
The Superintending Engineer [IT]
Jodhpur Vidyut Vitran Nigam Ltd.,
Office of the Superintending Engineer (IT)
JdVVNL, New Power House ,
Jodhpur -342003**

SUB: Submission of Bid for “Implementation of Revenue Management System in Jodhpur Discom on TOTEX (CAPEX+OPEX) Mode” against Tender no. TN-IT-26”.

Dear Sir,

We hereby submit our bid for **“Implementation of Revenue Management System in Jodhpur Discom on TOTEX (CAPEX+OPEX) Mode” against Tender no. TN-IT-26”**

We, the undersigned, declare that:

A. Declaration

- 1) We have examined and have no reservations to the Bidding Document, including Addenda No. (if Any):_____
- 2) We understand the prices are to be quoted strictly in the relevant BoQ sheet at e-proc site and no price shall be mentioned any where else in the bidding document, failing which our offer shall be rejected by the Discom without any further intimation to us.
- 3) We offer to supply in conformity with the Bidding Document and in accordance with the delivery schedule, and the specifications mentioned in the bid document.
- 4) We are submitting our bids for with complete set of enclosures.
- 5) We are submitting our Bid as Single Bidding company.
- 6) We agree for execution of tendered work as per the terms & conditions as specified in this Tender Document.
- 7) We hereby confirm that the bid comply all requirements set out in the bidding document and NO TECHNICAL and COMMERCIAL Deviation are contained in the Bid.
- 8) We understand that the Bids with Deviation from the requirement laid down in this document shall be considered as NON Responsive
- 9) The prices are as mentioned in BOQ.

10) The prices quoted are valid for a period of 90 days from the date of opening of "Financial- bids"

11) The quoted / agreed prices are inclusive of the following applicable Taxes (As per prevailing rates):

Enclose details of taxes included in the prices

S. No.	Name of Tax/Charges	Rate of Tax/Charges

12) We have noted the standard terms of payment and undertake to abide by the same.

13) The execution of work shall strictly be in accordance with work completion schedule as given in the Tender Document. In case we fail to execute the work as indicated therein as per the tender specifications, the penalty provisions shall be applicable as per provisions of the Contract.

14) The material supplied by us shall conform your specification

15) We confirm that we agree to adhere to all the commercial terms and conditions as well as the technical stipulation of your specification and there is No Deviation. Such acceptance has also been confirmed in prescribed schedules of this offer.

16) We confirm that we are qualified for bidding in terms of Qualification Requirements specified in the bidding documents and have submitted the requisite qualification Certificate & data / documents with the bid.

17) Until a formal contract is prepared and executed, this together with your written acceptance thereof in your notification of award shall constitute a binding contract between us.

18) We understand that the quantity mentioned in the financial schedule is just for evaluation purpose, any payment shall be made on the basis of actual numbers.

19) We understand that Jodhpur Discom/Discom reserves the right to invite detailed proposals from any private entrepreneur-company; irrespective of the fact whether the company or entrepreneur has been pre-qualified.

20) We also understand that the Jodhpur Discom reserves the right to reject any or all of the bids without assigning any reason thereof.

21) We undertake that we shall use the core billing module which may be readily fine-tuned to the requirements of Discom. We undertake to carry out all necessary System Integration work to ensure that the software offered meets all the requirements specified and needed for Jodhpur Discom.

22) We understand that the prices quoted in the BOQ are as defined in the RFP & the financial evaluation of the L-1 bidder shall be per Bid Document.

23) We agree to abide by all the conditions governing the proposals and decisions of the Jodhpur Discom.

B. General Profile of the Bidder

Kindly attach a copy of latest RoC to substantiate the information furnished against general profile of the bidder

Details	Responses
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Bidding Entity Nature	
Full legal name of the firm	
Year of establishment	
Registered Office Address	
Address for Correspondence	
Authorized person(s) to be contacted	
TeleDevice number(s)	
Email id	
Fax number	
Names, Addresses, Contact Emails and Mobile Nos. of the Key Management Personnel of Firm such as MD/Directors/CEO, etc.	
Type of the firm Private limited/Public limited/Government sector /other	
Whether registered under companies act, Partnership Act, or any other act applicable for registration of Firms in India	
Registration Number & Date	
Field organization and resources to be deployed for the proposed job	
No. of Projects executed in Utilities in past 5-years.	

We hereby certify that the above information is correct.

(Please enclose the ownership structure of the company, Incorporation Certificate, MOA, AOA duly attested by Company Secretary/ Director of the Company).

C. Financial Capabilities

CERTIFICATE OF FINANCIAL QUALIFICATION

S. No	Financial Year	Turn Over (In INR)	Whether Net Worth Positive or NOT (Select as applicable)	Whether Net Profit earned or not? (Select as applicable)
1	FY 2017-2018		YES/NO	YES/NO
2	FY 2018-2019		YES/NO	YES/NO
3	FY 2019-2020		YES/NO	YES/NO

(Turnover / Net Worth/ Net Profit shall be as per the currently applicable accounting standards prescribed by Institute of Chartered Accountants of India)

We hereby certify that the above information is correct.

Authorized signatory of the bidder

(Signature of the Statutory Auditor of the Bidder)

(Note: Enclose audited Financial Statements/ Annual Report of the aforementioned FYs duly signed by the Chartered Accountant. If audited balance sheets for the FY 2019-20 are not readily available then the provisional

balance sheets signed and certified by the company Chartered Accountant shall be submitted.).

D. Compliance to Technical Specifications and other requirement of Software

Bidder shall furnish undertaking regarding compliance to all the technical specifications and functionalities of the all Software Modules mentioned in this RfP. Please provide a summary of versions of various modules, if the proposed solution is a product. Use following format:-

Table 4.1: Details of Product Offered

Name of product& OEM	Module details	Version and year of release

Table 4.2:

Name of product& OEM	DISCOM	URL

E. IT Infrastructure/ Hardware Technical Specifications

The bidder shall furnish an undertaking regarding compliance to all the Guaranteed Technical Specifications of the IT Infrastructure along with technical data sheet of each hardware item, its make and model proposed.

Table5: Format for GTP Compliance of all Hardware

SN	Name of Hardware	Description	Specification	Compliance (Yes / No)	Make & Model Proposed

F. Approach and Methodology

The Approach and Methodology to be furnished with following parameter:

- i. Understanding of Purchaser and its requirement with clear mention of the deliverables. Schematic diagram showing all the modules & components of the systems covered in the specification and integration with existing systems.
- ii. Description of the technical solution for achieving the integrations as shown in the above schematic diagram
- iii. Project Team Structure
- iv. Resource planning and estimation
- v. Risk planning
- vi. Detailed work plan with timelines

a. Understanding of the Jodhpur Discom and its requirement of Purchaser and its requirement with clear mention of the deliverables. Schematic diagram showing all the modules & components of the systems covered in the specification and integration with existing systems.

Bidder should depict complete understanding of the as-is system of the Jodhpur Discom 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 Jodhpur Discom, if any.

b. Description of technical solution for achieving the integrations.

Please provide details of methodology followed by your organization in successfully implementing similar projects. Also highlight the special steps that your organization intends to take in order to ensure that the change from current system to proposed one will be smooth and effective.

c. 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:

Table7: Proposed Project Team Structure

Name of Staff	Position Assigned	International or Domestic	Firm	Employment 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							
B. Support Staff							

d. 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.

Table8: Proposed Resource Planning and Estimation

S N	Name of Staff	Position	Staff Input							Total
			In Weeks	W1	W2	W3	W4	W5	
	A. Professional Staff									
	B. Support Staff									

e. 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.

Table9: Risk Planning

Risk descriptio n	Risk categor y	Probabilit y (%)	Impact(High/medium/lo w) with impact description	Mitigatio n strategy

f. Detailed work plan with timelines

Please refer Schedule of Completion for the format.

The Agency has to submit the plan for customization and rollout of the activities defined in the scope of work and as per the terms and conditions mentioned in this RfP in various sections.

Penalty will be levied for delay in execution and rollout as per the Penalties given in this Tender document. Time is the essence of the contract and hence the scope of work has to be completed within stipulated time period.

The complete solution comprising of all application software modules, hardware and mobile application as envisaged in the RfP as per scope of work shall be deployed as per following implementation schedule:

SN	PARTICULAR OF ACTIVITY	TIME SCHEDULE DESIRED
1	Submission of Inception Report, detailed functional design specification & data sheet of all the software, hardware etc. under the scope of the Agency along with MIS Dashboards, report formats for approval from Discom	Within 30 days from the date of awarding contract (detailed work order). <i>** If not furnished within 45 days, the order may be cancelled.</i>
2	Approval/ comments by Discoms designated committee(s).	Within 14 days from the date of submission of point 2 above.
3	Offering complete solution by agency comprising of all application software modules, mobile application and hardware as envisaged in the RfP as per scope of work for testing / validation by DISCOM	Within 60 days from date of issuance of letter of award. <i>** If not offered within 60 days order may be cancelled</i>
4	Testing/ Validation of the system and approval/ comments by Discoms designated committee(s).	Within 14 days after activity as per point No. 3 above
5	Rectification/Incorporation of discrepancies/ gap observed by designated committee(s)	Within 30 days after activity as per point no. 4 above
6	Reoffer the complete solution by the agency comprising of all application software modules, mobile application and hardware as envisaged in the RfP as per scope of work for testing /	Immediate after completion of activity as per point no. 5 above

SN	PARTICULAR OF ACTIVITY	TIME SCHEDULE DESIRED
	validation to DISCOM	
7	Re-testing/re-validation of the system and approval /comments by Discoms designated committee(s)	Within 7 days after activity as per point no. 6 above
8	Deployment/ Roll Out and Go-live of Approved application software solution for each of the entire Discoms and Functional operation of the system	Within 90 days from issuance of the letter of award
9	Data Migration by agency in each Discom as per Data Format finalised & decided by Discom.	Within 90 days from issuance of the letter of award

The commercial and other available data required shall be obtained by the agency from DISCOM for migration. The payment shall start from the date of declaration of Go-Live.

G. Project Experience and Confirmation of Pre - Qualification Requirement

Bidder shall provide details of projects with application modules and other requirements (as mentioned in Eligibility Criteria,) which have been successfully completed as per pre-qualification requirements.

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

The bidder is required to submit the details of Pre-Qualification documents in the table no 12 & 13 as the case may be.

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

Table11: Details of Project Experience

SN	Name of project	necessarily including role played by Bidder, modules implemented, sector classification	Owner of Project assignment (Client name)	Cost of assignment	Date of Awarded commencement	Date of completion	Was assignment satisfactorily completed	Was it a Power Sector Project? (Y/N) Provide Detail
----	-----------------	---	---	--------------------	------------------------------	--------------------	---	---

--	--	--	--	--	--	--	--	--

Table 12: QUALIFICATION REQUIREMENT

1. The bidder shall furnish list of documents submitted in proof of meeting the pre-qualification requirements as per this bid document.

2. The bidder shall also produce an undertaking that the Application Software Module shall be COTS(SAP, ORACLE, etc)

or

the bidder shall produce an undertaking that the Application Software module shall be its in-house developed software which is duly tested, validated, reliable and duly secure

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. 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 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 Jodhpur Discom.

Table 14: Format of Curriculum Vitae

1	Proposed Position:			
2	Name of Firm			
3	Name of Staff:			
4	Date of Birth:		Nationality:	
5	Education:			
	Year	Degree/Examination	Institute/Board	
6	Membership of Professional Associations:			
7	Other Training:			
8	Countries of Work Experience:			
9	Languages:			

	Language	Speaking	Reading	Writing
10	Employment Record:			
	From	To	Employer	Positions Held
11	Detailed Tasks Assigned:		12	Work Undertaken that best illustrates capability to handle the tasks assigned:
	•			
13	Certification:			
	I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.			
	Signature of person		Date:	
	Full name of person :			
	Signature & Name of Authorised person(Bid Signing Authority) verifying the facts			

2. Details of Key Personnel's

The bidder has to deploy specialized and experienced resources for the successful and timely completion of the project. It is therefore desirable that the key personnel in the team as under :

Project Manager	
Functional leads	
Technical Lead- Interface/ data conversion/ customization	

The Bidder shall provide the key personnel namely the Project Manager, Functional Leads, Technical Leads and any other Specialist/Analysts required as appropriate. They need to have sufficient experience as specified above (profile of teams) in terms of relevance and number of years required to implement the proposed System. They are to be assigned to the project on full time basis. Should

the profile of any personnel be not acceptable to Discom, Discom will require the IP to suitably replace such personnel.

If for any reason beyond the control of the system, there arises a need to replace any personnel, the IP shall provide a replacement person of equivalent or better qualification and experience, subject to the written approval of Discom.

3. Facility Management Services Plan

The detail plan for FMS shall be given in accordance with the tender Document. In case of deviations, the same should be clearly indicated in Deviation sheet.

4. 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 which Jodhpur Discom 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.

5. 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 the tender 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 have any quality certification / Assessment? If so, please provide your responses for the following:

Table 16: 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	

Description	Bidder's Response
review?	

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

6. **Documentation**

Please provide a list and brief description 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.

Section 2. OTHER UNDERTAKINGS

2.1. CONFIRMATION OF “NO DEVIATION” IN TECHNICAL / COMMERCIAL TERMS AND CONDITIONS OF THIS TENDER

(To be furnished on Bidder's Letterhead.)

Bidder's Name & Address:

To

**To,
The Superintending Engineer [IT]
Jodhpur Vidyut Vitran Nigam Ltd.,
Office of the Superintending Engineer (IT)
JdVVNL, New Power House ,
Jodhpur -342003**

Dear Sirs,

Sub: Confirmation for “No Deviation” in Technical / Commercial terms & conditions of TN-IT-26

We hereby confirm that there is no deviation in technical / commercial terms & conditions stipulated in the bidding documents and we agree to adhere the same strictly.

(Signature).....

(Name).....

(Designation).....

(Common Seal).....

Date :

Place :

2.2. UNDERTKAING FOR VARIOUS INFORMATIONFURNISHED

(To be furnished on appropriate non-judicial Stamp Paper of Rs. 500/-, duly notarized)

Bidder's Name & Address:

To

To,

The Superintending Engineer [IT]

Jodhpur Vidyut Vitran Nigam Ltd.,

Office of the Superintending Engineer (IT)

JdVVNL, New Power House ,

Jodhpur -342003

Dear Sir,

Sub: Undertaking for various information against TN-IT-26.

We hereby confirm that that all the information against this bid and all other Certificates etc. including information and documents furnished in support of QR are correct and if in future Discom discover that any information furnished is not true, same may lead to the rejection of bid or termination of contract with other suitable action by the Nigam.

(Signature).....

(Name).....

(Designation).....

(Common Seal).....

Date :

Place :

BIDDER'S AUTHORISATION CERTIFICATE

(To be furnished on Bidder's Letterhead.)

To,
The Superintending Engineer [IT]
Jodhpur Vidyut Vitran Nigam Ltd.,
Office of the Superintending Engineer (IT)
JdVVNL, New Power House ,
Jodhpur -342003

[Reference No.]

I/ We <Name/ Designation> hereby declare/ certify that <Name/ Designation> is hereby authorized to sign relevant documents on behalf of the company/ firm in dealing with Tender/ NIT reference No. _____ dated _____.

He/ She is also authorized to attend meetings & submit technical & commercial information/ clarifications as may be required by you in the course of processing the Bid. For the purpose of validation, his/ her verified signatures are as under.

Thanking you,

Name of the Bidder: -

Verified

Signature:

Authorised Signatory: -

Seal of the Organization: -

Date:_____

Place:_____

Please attach the board resolution / valid power of attorney in favour of person signing this authorizing letter.

2.3. POWER OF ATTORNEY IN FAVOUR OF AUTHORISED SIGNATORY OF THE BIDDER

(To be stamped Non-Judicial Stamp Paper of Rs. 500/- duly notarized in name of the Bidding Entity)

2.4. FORMAT OF BANK GUARANTEE

(To be stamped in accordance with Stamp Act, the Non-Judicial Stamp Paper should be in the name of the issuing Bank)

Bank Guarantee No.:

Date:

To: *(insert Name and Address of Employer)*

WHEREAS M/s. *(insert name of Bidder)*..... having its Registered/Head Office at *(insert address of the Bidder)* *(herein after called "the Bidder")* has submitted its Bid for the performance of the Contract for.....*(insert name of the Package)*.....under.....*(insert Specification No)*..... *(herein after called "the Bid")*

KNOW ALL PERSONS by these present that WE *(insert name & address of the issuing bank)* having its Registered/Head Office at*(insert address of registered office of the bank)*..... *(herein after called "the Bank")*, are bound unto Jodhpur Vidyut Vitran Nigam Limited (hereinafter called "the Employer") in the sum of*(insert amount of Bid Security in figures & words)*..... for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents.

Sealed with the Seal of the said Bank this day of 20....

THE CONDITIONS of this obligation are:

- (1) If the Bidder withdraws its bid during the period of bid validity specified by the Bidder in the Bid Form; or
- (2) If the Bidder does not accept the corrections to arithmetical errors identified during preliminary evaluation of his bid pursuant to Tender document; or
- (3) If, as per the requirement of Qualification Requirements the Bidder is required to submit any Undertaking/Agreement and he fails to submit the same, duly attested by Notary Public of the place(s) of the respective executant(s) along with the Bid within ten days from the date of intimation of post – bid discussion; or

(4) in the case of a successful Bidder, if the Bidder fails within the specified time limit

(i) to sign the Contract Agreement, in accordance with Tender document, or

(ii) to furnish the required performance security, in accordance with the Tender document. or

(5) In any other case specifically provided for in the Tender document.

We undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it, owing to the occurrence of any of the above-named CONDITIONS or their combination, and specifying the occurred condition or conditions.

This guarantee will remain in full force up to and including (*insert date, which shall be the date 180 days from the date of Technical Bid Opening*)....., and any demand in respect thereof must reach the Bank not later than the above date.

For and on behalf of the Bank

[*Signature of the authorised signatory (ies)*]

Signature_____

Name_____

Designation_____

POA Number_____

Contact Number(s): Tel._____Mobile_____

Fax Number_____

Email _____

Seal of the Bank_____

Witness:

Signature_____

Name_____

Address_____

Contact Number(s): Tel._____Mobile_____

Email _____

Note:

1. The Bank Guarantee should be in accordance with the proforma as provided. However, in case the issuing bank insists for additional paragraph for limitation of liability, the following may be added at the end of the proforma of the Bank Guarantee [*i.e., end paragraph of the Bank Guarantee preceding the signature(s) of the issuing authority(ies) of the Bank Guarantee*]:

Quote

"Notwithstanding anything contained herein:

1. Our liability under this Bank Guarantee shall not exceed _____ (value in figures) _____ [_____ (value in words) _____].
2. This Bank Guarantee shall be valid upto _____ (validity date) _____.
3. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only & only if we receive a written claim or demand on or before _____ (validity date) _____."

2.5. SELF DECLARATION OF NOT BLACKLISTING

(To be furnished on appropriate non-judicial Stamp Paper of Rs. 500/-, duly notarized)

To,
**The Superintending Engineer [IT]
Jodhpur Vidyut Vitran Nigam Ltd.,
Office of the Superintending Engineer (IT) , JdVVNL, New Power House ,
Jodhpur -342003**

In response to the NIT Ref. No. _____ dated _____ for {Project Title}, as an Owner/ Partner/ Director/ Auth. Sign. Of _____, I/ We hereby declare that presently our Company/ firm _____, at the time of bidding: -

- a. possess the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Discom;
- b. have fulfilled my/ our obligation to pay such of the taxes payable to the Union and the State Government or any local authority as specified in the Bidding Document;
- c. is having unblemished record and is not declared ineligible for corrupt & fraudulent practices either indefinitely or for a particular period of time by any State/ Central government/ PSU/ UT.
- d. does not have any previous transgressions with any entity in India or any other country during the last three years
- e. does not blacklisted by any of the Central/State power utilities in India for fraudulent and corrupt practices
- f. is not insolvent in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and is not the subject of legal proceedings for any of the foregoing reasons;
- g. does not have, and our directors and officers not have been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a contract within a period of three years preceding the commencement of the contract, or not have been otherwise disqualified pursuant to debarment proceedings;
- h. does not have a conflict of interest as mentioned in the bidding document which materially affects the fair competition.
- i. will comply with the code of integrity as specified in the bidding document.
- j. The Bidder is qualified, not insolvent, not in receivership, not bankrupt or being wound up, not have affairs administered by a court or a judicial officer, not have business activities suspended, not blacklisted or debarred by any utility/ government agency, not have a conflict of interest.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken as per the provisions of the applicable Act and Rules

thereto prescribed by GoR, my/ our security may be forfeited in full and our bid, to the extent accepted, may be cancelled

Thanking you,

Signature.....

In the capacity of.....

Duly authorised to sign Proposal for And on behalf of.....

Seal of the Organization: -

Date.....

Place.....

Section 3. FORMAT FOR FINANCIAL BID SUBMISSION

(Not to be filled here)

(Financial offer has to be furnished in BOQ excel file Only, failing which the bid shall be rejected).

To,

**The Superintending Engineer [IT]
Jodhpur Vidyut Vitran Nigam Ltd.,
Office of the Superintending Engineer (IT)
JdVVNL, New Power House ,
Jodhpur -342003**

SUB: "Implementation of Revenue Management System in Jodhpur Discom on TOTEX (CAPEX+OPEX) Mode" against Tender no. TN-IT-26

Dear Sir,

We have procured the bid documents for engagement of Agency for **"Implementation of Revenue Management System in Jodhpur Discom on TOTEX (CAPEX+OPEX) Mode" against Tender no. TN-IT-26** We are submitting our financial proposal as hereunder:-

Name of the Bidder/ Bidding Firm / Company :

S N	Item Description	Quantity	Unit	Unit Price excluding applicable GST	Rate of GST applicable in %
1	CAPEX for Supply, installation, testing, commissioning and configuration of all Hardware and complete RMS application suite (including all type of licence fee) as per entire scope of work mentioned in the Specification of this RfP for successful implementation of Revenue Management System				
i	Desktop PCs	693	Nos.		
ii	Desktop PC with 80 Column Dot Matrix Printer or better for Cash Counter	207	Nos.		
iii	UPS (1x 2KVA– 4hrs backup)	186	Nos.		
iv	UPS (1x 1KVA– 2hrs backup)	60	Nos.		
v	Network Laser printer	196	Nos.		
vi	Laser printer	62	Nos.		

vii	Android based Smart Mobile phone with communication cable for meter reading	4433	Nos.		
viii	Bluetooth Mobile printer	4433	Nos.		
ix	Power Bank, Accessories etc	4433	Nos.		
x	GPRS (4G or better) SIMs with necessary Data Packs	4433	Nos.		
xi	QR Code Reader & scanner	196	Nos.		
xii	Biometric Reader (to be used with desktop PCs for login purpose)	610	Nos.		
2	Monthly OPEX Cost (O&M of all Hardware commissioned and RMS application suite, Facility Management Services, Implementation of day to day Change Request in software module, Integration charges, Annual Technical Support, Annual Maintenance Charges, Insurance, GPRS connectivity for Mobile, Consumable items, Manpower resource at DisCom HQ, Circle, Division, Sub-division, Help desk Project Implementation & Management charges, and any other charges for the successful completion of the RMS project as per entire scope of work as per technical & commercial specifications)	45,00,000	Regular Consumer		
3	OPTIONAL ITEM: Extra manpower, if required for associated field & office works/activities, meter reading etc. related to all the software modules (Rate to be quoted per skilled manpower per month <i>(shall not be part of evaluation, Quantity of manpower may vary as per need and rate quoted shall not</i>	1	No.		

	<i>be less than the rates prescribed in governing labour laws at the time of bid) for Jodhpur Discom</i>				
<p>Note: The bidder has to quote for all the items including optional items mandatorily failing which the offer shall be summarily rejected. Optional prices quoted shall not be considered for evaluation of financial score and purchaser shall finalize the optional price which is most competitive among all the bidders and beneficial to the purchaser and shall acceptable by successful bidder. The sum of prices quoted for Jodhpur Discom other than optional item shall be considered for financial score and evaluation.</p>					

Name: _____
[Authorized Signatory]

Section 4. ANNEXURES – BILL OF MATERIAL

4.1. Bill of Material for Hardware to be deployed:

List of hardware to be deployed in each office as defined below:

S.No.	Hardware Description	Make	Model
1	Desktop PCs		
2	Desktop PC with 80 Column Dot Matrix Printer or better for Cash Counter		
3	UPS (1x 2KVA– 4hrs backup)		
4	UPS (1x 1KVA– 2hrs backup)		
5	Network Laser printer		
6	Laser printer		
7	Android based Smart Mobile phone with communication cable for meter reading		
8	Bluetooth Mobile printer		
9	Power Bank, Accessories etc		
10	GPRS (4G or better) SIMs with necessary Data Packs		
11	QR Code Reader/ scanner		
12	Biometric Reader (to be used with desktop PCs for login purpose)		

4.2. Bill of Material for the Software to be deployed as mentioned below:

S.No.	Application Module and System Software Name	Proposed OEM Solution

9.3 Tentative Count of Sub-division wise and category wise Consumers

Shall be provide to successful bidder at the time of LoA

7 Software Compliances

A. Compliance to Technical Specifications and other requirement of Software

Refer to Technical Specifications, for details. Please respond to each specification in following format. Copy first three columns from Functional requirement of package given in this document.

Note: Bidder has to Fill in Column "Bidders Response" with "Yes" or "No", in case of response given "Yes" in column 3, to be supported with catalogues for COTS / screen shots for other than COTS.

N o.	System Functionality/Technical Requirement	JDVVNL Requirement		Bidders Response (Yes or No) (3)
		Should be available at bidding time (1)	Maybe customise d before commen cement (2)	
A	Generic features of the Software Solution/System			
1	Access Control with details of data/service access for different users	YES	-	
2	Backup strategy	-	YES	
3	Security and Encryption	YES	-	
4	Confidentiality	YES	-	
5	Audit Trails	YES	-	
6	Availability vis-à-vis Performance Metrics	-	YES	
7	Monitoring and Test Tools	YES	-	
8	Hosting & Delivery policies	-	YES	
9	Software upgrades and updates	-	YES	
10	Service loss/ degradation severity definitions and remedial times, i.e. Disaster Recovery and Data protection plans	-	YES	
11	Automatic Failover schemes in place	-	YES	
12	Automatic updates and patch management	-	YES	
13	Scalability as per requirement.	-	YES	
14	Integration with existing and future applications	-	YES	

B	Billing System COTS (SAP/Oracle)			
I	Core Billing System			
1	The core module of Billing is to be provided with all the detailed billing and revenue management software's features/process & functionalities are to be provided, configured and customized as per the TCOS and business processes of JDVVNL.	YES	-	
2	The web based application shall have the most robust, flexible and configurable billing engine for generation of bills on various modes and technologies that are adopted currently by the utilities thus providing the required flexibility to the Discom in adopting to the latest technology advancements for effective, transparent and timely billing.	YES	-	
3	The system shall invariably support Spot Billing, Automated Spot Billing, Photo Spot Billing, Batch billing for consumers having load below 18.65 kW etc.	Yes	-	
4	Base Bills shall be generated for consumers having above 18.5 kW loads either by obtaining the reading directly from the AMR or the Smart Meter or by the way of input.	-	Yes	
5	The Spot billing software shall be developed for machines based on operating system like Android.	Yes	-	
6	The ANDROID software shall also have provision for automated data downloading from the consumer meters	Yes	-	
7	In case if the utility wants to use the Spot Billing machine only for reading capture the same shall be made available as configuration option	-	Yes	
8	The Android based Smartphone and software shall be configurable for spot payment collection and	Yes	-	

	capturing other field information.			
9	The system shall invariably provide pre-paid billing and collection system and also allow integration with existing pre-paid system functionalities available in smart metering/ AMI and other pre-paid billing and collection.	Yes		
li	Major features shall include:			
1	Capturing monthly/bi-monthly meter readings of LT consumers by meter inspectors, via Spot Billing Machines (ANDROID based Mobile Devices) with the help of suitable ANDROID application	-	Yes	
2	Online upload of meter reading data via GPRS if connectivity is available else store the readings locally and upload whenever connectivity is available.	Yes	-	
3	Option of upload of meter reading data via WI-FI when the Feeder In charge/Meter Reader returns to the AEN Office premises at the end of the day	Yes	-	
4	Downloading of Consumer Master Information into the Smart Phone online via WIFI/GPRS	-	Yes	
5	SMS to consumers once the Meter Reader starts his meter reading operations in his designated area. The SMS packages shall be provided by DISCOM.	-	Yes	
6	SMS to the consumers for the billing amount in the Bill generated for continuous 3 days before due date of the bill.	-	Yes	
7	SMS to consumers whose meter could not be read by the Meter Inspector for No Access. The SMS packages shall be provided by DISCOM.	-	Yes	
8	SMS to consumers with reading details after the reading is captured. The SMS	-	Yes	

	packages shall be provided by DISCOM.			
9	System should be capable to capture Billing Parameter, Current kWh as well as Billing kW.	-	Yes	
10	Automated meter reading (AMR) for CT meters and in future, Smart Meters, thus doing away with manual readings	-	Yes	
11	Bill processing in centralized bill server for LT and HT consumers	Yes	-	
12	On demand generation of bills and closing of accounts as per prevailing TCOS, in case of voluntary disconnection for LT consumers.	-	Yes	
13	Bill Correction, part bills, consolidated bills, group bills etc.	-	Yes.	
14	Auto and manual entry of sundries	-	Yes	
15	Auto and manual entry of meter updates	-	Yes	
16	Auto and manual process for updating various key parameters as per the TCOS & Business rules of	Yes	-	
17	Accounting of Instalments, part payments, Govt. subsidies, wave offs etc.		Yes	
18	Generation of Disconnection notice for non-payment (Except Stay from the Court /Settlement committee/VCR monitoring committee, Competent authority)	Yes	-	
19	Updating and maintenance of security deposit for LT & HT consumers Maintainable SD calculation for LT & HT Consumers	-	Yes	
20	SD interest calculation for LT & HT consumers	-	Yes	
21	Additional SD instalment bill/ including generation of notices of enhance security as per prevailing TCOS of LT/HT consumers	-	Yes	
22	Processing of Bank Guarantee & Letter of Credit for HT consumers.	-	Yes	
23	Advance Payment facility.	-	Yes	
	Consumer History View at least last			

24	3 years, Meter History View, Export & import of Consumers from one location to another location.	Yes	-	
25	Special Conditions/features required for High Value Consumers i.e. HT/MIP	-	Yes	
26	Secure import of meter readings & billing parameters into the system from third party systems. Provision to upload billing parameters from CMRI/MRI etc., directly into the system, both in batch and single read modes.	-	Yes.	
27	Bills should generate after duly considering the imports and exports of energies(wind power, IXA), changes of meters, change of CT/PT, TOD Slabs as per tariff and business rules.	-	Yes	
28	High Value Consumer bills are to be printed on large format (A4 plus).	-	Yes	
29	HT bills should provide in 4 copies for each consumer.	-	Yes	
30	The system shall have provision to generate advanced FNB bills.	Yes	-	
31	Security deposit to be auto adjusted.	-	Yes	
32	The system shall provision for accounting consumers with special meters like prepaid meters and shall support the entire meter-to-cash cycle or integrate with the third-party systems for enabling the same.	-	Yes	
33	The system shall have role based user access and work flow based entry and approval process in built. Login & Biometric based security shall be enabled for all such approvals and transactions performed.	-	Yes	
lii	The system shall also facilitate:			
1	Registration of mobile number, email ID .	Yes	-	
2	Duplicate bill	-	Yes	

3	Registration for e-Bills	-	Yes	
4	On-line payment of bills	-	Yes	
5	Statement of electricity bills vis-à-vis payments	-	Yes	
6	Viewing latest payment status	-	Yes	
7	Daily consumption status for Smart meters	-	Yes	
8	Application for new connection / additional load	-	Yes	
9	Transfer of Supply	-	Yes	
10	Correction in mailing address	-	Yes	
11	Augmentation of load / regularization for installation of AC	-	Yes	
12	Voluntary Disconnection activities	-	Yes	
13	Handling of consumer complaints and their resolution	-	Yes	
14	System for informing non-usage of electricity during a certain period of time due to absence	-	Yes	
15	Reconnection of Supply	-	Yes	
16	SD refund tracker	-	Yes	
17	Viewing of meter information, consumption history and SD details	-	Yes	
18	Energy calculator	-	Yes	
19	Power consumption guide	-	Yes	
20	Reporting disruption of supply	-	Yes	
21	Reporting power theft	-	Yes	
22	Request for bill tariff change	-	Yes	
iv	Tariff & billing rule management			
1	The software shall provide a UI based interface for configuring tariff and business rules.	Yes	-	
2	The software shall have provisions for retrospective and prospective billing.	-	Yes	
3	The software shall have provision to calculate part bills with variable bill period.	-	Yes	
4	In a nut shell the software shall have a flexible, user configurable tariff /TCOS and business rule management interface and almost all the changes can be configured without changing at the code level.	-	Yes	
v	Spot Billing Software/System			

1	The Web Based Software shall have provision to create, update and modify route traversal plans as per the billing schedules. The primary route traversal plans shall be FEEDER WISE.	Yes	-	
2	SBM (ANDROID Based Mobile Devices) Spot billing software shall facilitate bidirectional communication with the central server using standard mobile network	-	Yes.	
3	The Spot billing software on the SBM shall facilitate local storing of the data and based on the availability of connectivity the mobile data shall transfer the same to the central server.	Yes	-	
4	Automated data downloads with or without user intervention i.e. the pre-billing data as per the route plans shall be automatically downloaded to the SBM (ANDROID Based Mobile Devices).	-	Yes	
5	Real-time data uploads to central server (bills)	-	Yes	
6	Meter readers / Feeder In-charge need not visit sub divisions.	-	Yes	
7	Features to downloading and uploading from central server through connecting through Wifi.	-	Yes	
8	The SBM (ANDROID Based Mobile Devices) software shall be auto updated from central server for tariff, data validation and other billing rules	-	Yes	
9	The SBM machine shall be capable of generating bills both in online and offline mode. In offline mode, the bills shall be queued for updating to the central server and shall be updated once network is available in background.	-	Yes	
10	The SBM shall have the entire billing tariff built into it for generating bills along with	Yes	-	

	incorporating all the business processes and rules associated with consumer billing, consumer status, meter status etc.			
11	The device software shall have options to capture the photo of the dial of the meter. Option to capture multiple photos to depict any abnormality shall also be provisioned.	Yes	-	
12	The device software shall have capabilities to record the GPS co-ordinates. The software should display the location accuracy for more accurate GPS capturing.	Yes	-	
13	The Software on the SBM shall be able to print the bill over to a blue tooth printer.	Yes	-	
14	The system shall have provision for spot cash collection module with configuration option.	Yes	-	
15	Provision to load any other software shall be available and the same shall be developed and loaded as per the requirements of Discom.	-	Yes	
16	The SBM software shall have provisions to capture any other additional information like consumer mobile no, meter detail, observations etc.	-	Yes	
17	If the Discom wants to implement automated spot billing, then the bidder has to facilitate the same by making the required changes in the software during the contract period.	-	Yes	
18	SBM software shall have provision to generate various reports as defined by Discom from time to time.	-	Yes	
19	SBM software shall have features to download the DC notices from Central Server.	-	Yes	
20	Smart Phones provided for billing shall be secured i.e. Upon power on the smartphone shall directly	-	Yes	

	launch only the authorized apps of the DISCOM and all other feature of the smartphone that are not used for DISCOM purpose shall not be enabled/available to the user.			
21	The data stored in the Smart Phones shall be secured with encryption and shall be tamper proof.	-	Yes	
22	The SBM Software shall log all the critical events like app events, exceptions, system crash events, user events, network signal strengths, memory, data usage, battery usage and the same shall be available to be synced to the central server either upon user initiation or automatically synced to the central server along with the bill & other data.	-	Yes	
23	Automated Spot Bill generation by direct downloading of meter data to the Android Smart Phone from communicable meters. The software shall facilitate downloading of billing parameters or the complete meter data or any desired parameters as specified by JDVVNL from time to time. The Android smart phone shall automatically generate the spot bill without manual punching/feeding of billing parameters.	Yes	-	
24	The meter data downloaded other than billing parameters shall be uploaded into the server software for further analysis.	-	Yes	
	Mobile Device Management Information System			
1	Android Smart Phone device management module shall facilitate the management, administration, adding, removing, user management of ANDROID Based Mobile Devices'.	Yes	-	

2	To view the live status of device based on location, meter reader, sub division, division, circle, zone, DISCOM etc.	-	Yes	
3	Group and view the devices based on Meter Readers, Sub Divisions etc.	-	Yes	
4	he device view shall show the live details of the device indicating the operational hours, signal strength, battery status, last bill issued GPS location etc.	-	Yes	
5	Sub Divisional officers shall be able to trace the meter readers and monitor progress on Google map.	Yes	-	
6	The software shall have facility to log all the critical events of the devices as per the configuration.	-	Yes	
7	Software shall have mobile device management capability with KIOSK mode option for secure photo billing	Yes		
8	The Software shall have the facility to monitor the key parameters like battery, network, data usages.	Yes	-	
9	The software shall monitor the version of the software that is currently in the device and check for update, tariff and rule changes and update the same to the device.	Yes	-	
10	The software module shall have facility to trace the device life cycle.	-	Yes	
11	Any other feature that would increase the meter reading monitoring shall be made available as per Discom requirements from time to time.	-	Yes	
	Revenue Management System			
	Payment Collection			
1	This module shall cover the following functional requirements:			
2	Handles the entire payment collection of the Discom	-	Yes	
3	Multi-tiered approach to handle	-		

	operations at all levels Cashiers & Supervisors at the Cash Offices			
	Controlling Officers at Treasury Department/e- Grass/RTGS/NEFT			
4	Senior Management	-	Yes	
5	Automatic generation of Cash Book	-	Yes	
6	Automatic generation of Lodgement Report	-	Yes	
7	Data integration with existing & future ERP system for final accounting	-	Yes	
8	Integrates with other downstream ITESs of the company	-	Yes	
9	Role based security	-	Yes	
10	Extensive MIS to facilitate monitoring and Control	-	Yes	
11	Rigorous Data Validation Process to ensure data integrity	-	Yes	
12	Deployed Over a High Available Architecture	-	Yes	
13	Validation for deposit of cash only up to Rs. 20,000 per bill as per TCOS	-	Yes	
14	Validation for dishonoured cheque deposit second time as per TCOS	-	Yes	
15	Facility for periodic reconciliation as defined by JDVVNL with the payments imported from other agencies in all aspects including bank reconciliation.	-	Yes	
	The payment collection module shall facilitate payment collection in various modes viz:	-	Yes	
1	Payment collection by Feeder In- charge / meter readers over spot billing machines.	Yes	-	
2	Payment collection by Discom officers using hand held devise.	-	Yes	
3	Payment collection through ATP.	-	Yes	
4	Payment collection through dedicated cash counters.	-	Yes	
5	Payment collection through online payment gateways, banks /debit & credit cards, authorized third	-	Yes	

	parties.			
6	Payment collection through E-mitra and other state government enabled kiosks/portals or systems.	-	Yes	
7	Payments collected by manual receipts (payment stubs)	-	Yes	
8	Payment collection through mobile app which shall further integrate with online payment gateway.	-	Yes	
9	Online Payment through digital wallets, Govt. Apps like BHIM, UPI Gateways and other future payment gateways or interfaces that may come during the tenure of the contract.	-	Yes	
	Other payment Collection features			
1	Provision to collect and account payments against bills and other miscellaneous heads. The payment collection system shall be secure and reliable and shall facilitate cash reconciliation at various levels.	-	Yes	
2	Payment collection software should have dashboards and MIS reports for monitoring payment collection and reconciliation at various levels.	Yes	-	
3	Payment collection module should have transaction based approval before the payments are posted and accounted.	-	Yes	
4	The system should have the flexibility to accept full, partial advance payments. The system should also have the facility to centrally change these settings from time to time.		Yes.	
5	System should support group payment facility for acceptance of one single payment for set of consumer accounts. System should generate reconciliation reports for the same.		Yes	
	System must be capable of handling centralized or		Yes	

6	decentralized payment processing. System should be built with cash counter which can be installed at sub division offices & accounting sections which should work on real time data synchronization basis.			
7	In case of internet is not available at sub division offices or internet is down for specific period of time then the system (spot billing devices and sub-division office) should have provision to work in offline mode.		Yes	
8	The generation of receipt and printing should be continued and data has to be stored in local system. The system should be capable of holding and population of data on central serves for 24 hrs of operations or in multiple batches based on the need so that the performance of the system should not hamper. On restoration of internet payment details has to be transferred to central server.		Yes	
9	System must be able to generate & send SMS/Email automatically to customer for every payment received as per the requirement and directions of DISCOM.		Yes	
10	All payments should be associated with the login-id of the cashier or person who operates the cash counter. Each payment should include machine ID, Payment centre codes at which they were received, unique receipt number.		Yes	
11	System should support acceptance of payment by reading the QR code for bills issue through Spot billing device/ mobile device and QR code on base bills.		Yes	
12	System should have the flexibility of reversal of payments in case of	Yes	Yes	

	cheque dishonor. Blocking of further payment by cheque till a defined timeframe.			
13	System should have the logic of defining the distribution of the payments against the bills based on the specific order or as defined by utility like Tax, Interest, Revenue etc.		Yes	
14	System should generate centralized collection report and closing of collection process (cash book) on daily basis with relevant approval.		Yes	
15	System should have the facility of generation of ASD notices.		Yes	
16	System should support monthly payment reconciliation process.		Yes	
	Disconnection and Reconnection Management System		Yes	
1	The web based software shall have provision to identify the consumers liable for disconnection and shall have provision to generate notices, lists, send email and SMS alerts to consumer as well as Discom official.		Yes	
2	The web based software shall have provisions to generate various MIS reports for enabling effective disconnection and reconnection.	Yes		
3	The web based software shall have work flow based rules for permanent disconnected consumers until they are permanently disconnected and dismantled including the process for adjustment of deposit and preparation of final bill and write-off's.	-	Yes	
4	The web based software shall have provision to enable record on field disconnection status through hand held devices if	-	Yes	

	desired by the DISCOM.			
5	The web based software shall have facility to push the disconnection list and reconnection list to the mobile apps installed on the SBM (ANDROID Based Mobile Devices) for implementing disconnection and reconnection.	-	Yes	
6	The web based software shall have provision to generate Dis-Connection notice as per Discom Norms, which can be downloaded and printed through Android based Smart Phone.	-	Yes	
	Mobile app for effecting disconnection and reconnection shall be provided by the bidder.	-	Yes	
1	Mobile app user shall have the provision to capture the inspection details at the time of field visit. Complete flow shall be provided for the disconnection and reconnection.	-	Yes	
2	The system shall have work flow based module for facilitating the disconnection to permanent disconnection and dismantling by generating all the required notices including the adjustment of deposit etc.	-	Yes	
	New Connection Management System			
1	The new connection module shall facilitate the entry of new consumers into the system either by the way of Keying in the data Importing from a third-party system Bulk uploads through csv files etc.		Yes.	
2	Online Web Application based new connection management as per the Business rules, Tariff, SOP& TCOS of the DISCOM.	Yes		
	The module for work flow shall be for processing of new consumer		Yes	

3	application. The application shall have inbuilt document management system for uploading and storing all the require documents for new connection. Further the consumer shall be able to track the status of the applications and shall receive email, SMS alerts on the application stage and status. The modules shall incorporate all the existing stages and business rules involved in processing the new consumer application. Comprehensive dashboards and reports shall depict the number of applications received and applications at each stage and if the applications are being processed within as the regulatory standards.	-		
4	The web based application shall also have comprehensive input screens for entering the new consumer details from the consumer application files. Scan and upload the relevant documents for future use. The entered details after approval shall result in the first bill generation of the consumer.	-	Yes	
5	The module shall facilitate bulk importing of master data of consumers created from third party systems/schemes where bulk connections are released and data is provided in soft digital form.	-	Yes	
6	The module shall have functionalities for inter division transfer of consumer master data and merging of accounting units etc.	-	Yes	
7	The Module shall facilitate grouping of consumers based on various requirements for group bill generation etc.	-	Yes	

8	Bulk field electrical network re-alignments like updating of feeder code, TC reorganization etc., shall be facilitated in batch mode for making the changes quickly.	-	Yes	
9	The status of the applications, application pending at various stages shall be made available through drill down dash boards right from corporate level to the sub division or OM level.	-	Yes	
	This module shall include the following features:	-	Yes	
1	Receipt of Application Details – online / Offline	Yes	-	
2	Site inspection, wherever necessary and capturing of techno-commercial information from site.	-	Yes	
3	Scrutiny of Inspection report by appropriate authority.	-	Yes	
4	Sending of “Offer Letter” (intention to provide supply) and Security Deposit Bill to the applicant – through e- mail/ courier. Offer letter mentions the compliances that are required to be met by the applicant.	-	Yes	
5	Meeting of compliances by applicant including the payment of Security Deposit Bill.	-	Yes	
6	Transfer of static as well as payment related data to Billing Software for generation of a new consumer.	-	Yes	
7	Sending of data to Site Office for execution of job when all compliances are met – relevant data is transferred electronically to Site Office System (SOS).	-	Yes	
8	Receiving job completion and meter installation / exchange related data electronically from SOS post execution of job.	-	Yes	
9	Transfer of meter installation data to Billing Software for inducting the applicant as a Consumer.	-	Yes	

	Feeder Information System:			
1	It is intended that certain parameters pertaining to 11 KV Feeders would be captured by the Feeder In charge / Discom Officers for energy audit, performance monitoring, operation and management. Agency has to provide both mobile app and web interface for entering the required data, capturing the inputs, etc. The utility will facilitate historical data to the successful bidder.	Yes	-	
2	As Android Smart Phone with GPS capturing capabilities are going to be used, the software solution should have a GIS module wherein the consumer information, network asset information, any other information that is captured by the field personnel can be displayed on a GIS map with provision to edit, update etc. The various elements shall be distinctly depicted with different icons/colour etc. The main objective shall be to extensively use this module for depicting the consumer information, assets and for enabling and planning different day to day operation and maintenance activities of the DISCOM. The cost of the acquiring the necessary licences if required shall be factored into the bid and the same shall be valid during the tenure of the contract.	Yes	-	
3	A mobile app having functionalities to facilitate the field personnel in recording the various network elements for creating the single line diagram shall be provided. The back end software shall have provisions for depicting the Single Line Diagram with options of expansions of LT network	Yes	-	

	up to consumer level.			
4	For capturing the various HT & LT components of the distribution network Feeder wise for creation and depiction in the form of a Single Line Diagram. The module shall facilitate the Feeder In-charge in accurately mapping the various branches, sub braches and multiple branches as per the actual site data. Provision shall be provided to update, edit/relocate or modify any asset captured.	-	Yes	
5	Agency has to develop comprehensive MIS reports and Dashboards depicting the various parameters captured. The Drill down dash boards / MIS Reports shall have data grouping and data agitations at various levels i.e. DTC, Feeder, Sub Station, Sub Division, Division, Circle, Zone and Discom level.	-	Yes	
6	The bidder shall provide both the mobile app and web module in the software to facilitate the various functionalities of the feeder In-charge.	Yes	-	
7	Provision to assign, reassign, delete feeder to feeder In-charge.	Yes	-	
8	List the consumers, DTC connected to the feeder	Yes	-	
9	Provision to enter the feeder reading/consumption at varying intervals for assessing the energy availability, consumption, losses etc.	-	Yes	
10	Provision to enter the DTC reading/consumption manually.	-	Yes	
11	Provision to Add/Modify/Delete the Feeder information like the meter make, CTPT, initial reading, status of meters, supply information etc.	-	Yes	
12	The software shall facilitate the Feeder In-charge in arriving at the energy audit at desired intervals.	-	Yes	

13	The Data in the mobile app shall reside local and shall assist the Feeder In-charge in monitoring the critical parameters without the necessity of actually accessing the central server.	-	Yes	
14	The software shall have alerts, dashboards, reminders to give 360 degree view of the energy consumption and related parameters for energy audit and monitoring purpose.	-	Yes	
15	Any other input and reporting formats that are required shall be finalized during the execution stage with the selected bidder.	-	Yes	
	GIS Information System			
1	The software shall facilitate consumer tagging as per the electricity distribution network. The binders can be re-organized substation wise, feeder wise / distribution transformer wise. During the initial 4 months the required information on the location of the consumer (DTC, Feeder etc..) shall be provided by DISCOM/Meter Readers. The software shall have options to bulk upload the same and then organize billing as per Sub Station, Feeder and DTC wise.		Yes	
2	The software shall have provision for tagging, re- tagging, updating features based on GIS referencing.		Yes	
3	The system shall facilitate to capture electrical network asset details with geo-coordinates/references, consumer geo-tagging.	Yes	-	
4	The software shall facilitate creation of route plans, route maps to enable efficient billing in a timely manner and to facilitate re-organization of existing networks, geographic are etc., as desired by the DISCOM.	-	Yes	

5	The software shall facilitate new consumer updating as and when new consumers are added.		Yes.	
6	The software shall have provision to implement billing at desired periods and thus suitably re-organize the route plans and consumer indices.	-	Yes	
	Functional Requirement of GIO tagging (Assets and Consumers)			
1	The GIS module on Google map should be integrated with the various core processes of Billing / Collection / Disconnection/ energy auditing etc. The system should have provision for capturing, storing, checking, integrating, analyzing and displaying geo data related to positions on the Earth's surface and data related to attributes of the assets / Customers in Discom area.	Yes	-	
2	Display of all Billing information data on the Google Map with status of the billed information.	-	Yes	
3	Display of arrears information on the Google Map	-	Yes	
4	Display of Collection information on the Map.	-	Yes	
5	Display of the location information of the Meter Readers on the Google Map.	-	Yes	
6	Location MR / Consumer through Latitude and Longitude Coordinates previously stored in the system.	-	Yes	
7	Complete workflow of other systems should be seamlessly integrated with the core processes of the Billing and collection and no separate activity should be initiated to achieve the above objective.	-	Yes	
	Consumer Information & Service System			
The following indicative requirements with regards to implementation of web				

portal / mobile applications to facilitate real time customer services:				
1	The Home page shall provide a brief description about the site, the various functionalities it provides and promotional features or any kind of advertisement for special programs can be placed in this page. Login Component is provided and registered users may login using their username and password. New Users can also register by clicking on the First Time Users Register link. The Forgot Password link helps the user to retrieve their password.	-	Yes	
2	The Log In page shall ask the registered users for their username and password while the new members can also register through this page.	-	Yes	
3	The user is asked for personal, security and account information in this page before registering.	-	Yes	
4	The user is asked for his first name, last name, zip code, birthday and his primary email address before being provided with the security question.	-	Yes	
5	The new password is sent to the user by email / SMS to his primary email address or registered mobile number as recorded in his profile, on answering the question correctly.	-	Yes	
6	Once the user has logged in, he can change his credentials i.e. Username and Password by clicking on the Change Credentials link		Yes	
7	There will be a "My Accounts" page, which is the landing page for the users with multiple accounts. The screen contains a brief summary of all the accounts such as the account name, address, balance, due date and	-	Yes	

	the account status.			
8	There will be a "Single Account" page, which will be the landing page for the customers. The screen contains a description of the account. Any status messages pertaining to the account involving immediate user action is also presented here.	-	Yes	
9	There will be a "Consumption History Page" that provides an account of the usage for the last 12 months graphically. A more detailed analysis is provided in a tabular format listing the meter reading date, the reading, consumption, number of days, charges etc.	Yes	-	
10	The consumption calculator popup is provided to help the user calculate the usage between any two given dates.	-	Yes	
11	The Bill Summary page gives a record of the Billing amounts and Payments made by the customer over the last few months.	-	Yes	
12	The user is provided with the options of registering in Online Billing and also continues with paper bills.	-	Yes	
13	The View and Pay Bill page presents a short summary of the bill. The user can also view the bill in PDF format by clicking on the link 'View Bill as PDF'.	-	Yes	
14	The user is provided with different modes of payment namely Credit Card / Debit card / Net Banking / Mobile Wallet etc. On providing the valid credentials payment can be made directly from the site. The online payment shall be processed through secured payment gateways	-	Yes	
15	There should be provisions for the user to pay multiple bills	-	Yes	

16	There should be a "Manage Accounts" page which shall help the user to manage all his consumer accounts from a single page	-	Yes	
17	There should be a "Service Requests" page that will allow customer to lodge request for services such as new connection, disconnection, load change, name change, category change, meter shifting etc. Depending on the regulatory/utility requirements user is required to submit the documents.	-	Yes	
18	There will be a "Service Status" screen which is read only screen which the user can view. Status of various pending requests for the customer such as load change, name change, category change, meter shifting etc. are listed here.	-	Yes	
19	Under the "Complaint" page, user can log his complaint using a drop down menu and also enter some text. A "Complaint Status" page shall provide the user a read only screen to view the complaint status	-	Yes	
20	"Report Power Failure" screen contains static data related to the power failure. The contact number is mentioned in case any power failure occurs. The user calls up the number and reports the power failure and necessary action is taken to restore the power connection.	-	Yes	
21	Update Profile screen enables the user to update his/her profile information. The user can edit the personal information and click on Update Changes button to save those changes.	-	Yes	
	Mobile Apps development, deployment&			
	maintenance			

1	The platform's used for development of mobile apps should support development of Hybrid Applications/Native Apps.	-	Yes	
2	User Interface and User Experience of mobile App is to be designed to ensure that the service is user friendly.	-	Yes	
3	Design of consistent visual elements and Web Portal & Mobile Apps architecture that is scalable and expandable.	-	Yes	
4	Resolution independent Mobile Apps that will automatically expand/compress itself as per the device screen resolution and should be as per standards of W3C.	-	Yes	
5	Delivery of Officers mobile applications should be in the form of a published mobile application on each platform in the market place (Google/ Andriod Play store, Apple store and MS). All Key KPIs should be drill down from Corporate to Subdivision Level.	YES		
6	Integration with any existing or future applications through SOA (service oriented architecture) - Web services/API/ JSON, Social Media platform etc.	-	Yes	
7	The solution Framework, tools, technology of mobile App Development platform should be submitted along with technical proposal and should be able to address the future scalability requirements, in terms of both application (to add new services) and infrastructure and backend.	-	Yes	
8	The mobile Apps should provide an update feature in case of newly published version.	-	Yes	
	Consumer facing mobile applications will be hosted on			

9	mobile applications platforms (Apple store, Android Play store.) whereas the web portal/application and services and related APIs will be hosted on State DC & DR servers	Yes	--	
10	Provide technical documentation, design, architecture, technology, tools, etc. which will be used to develop Mobile Apps.	-	Yes	
11	Integrate with the backend systems (user profile and registration, authentication, application processing, push notifications, etc.).	-	Yes	
12	The data must be fetched from predefined data in central database and all the data should be directly updated to the central database	-	Yes	
13	The complete solution proposed must be SOA compliant and preferably based on secured open standards.	-	Yes	
14	Vendor should have experience in hosting the mobile Apps and updating new versions as and when required. Vendor should provide all the details and should be part of technical proposal.	-	Yes	
15	Mobile applications developed on development platform provided by the bidder should run on all types of handsets/TAB/Smart phone existing as well as new handsets coming in the market. The bidder shall provide upgrades/patches etc.	-	Yes	
16	The platform should provide the means to manage subscriptions of push notification services etc.	-	Yes	
17	Mobile applications to be implemented in pursuance to the International & industry standard implementation standards and procedure for successful implementation of the project.	-	Yes	

	Mobile Apps for Consumers	-	Yes	
This shall support following features:			-	Yes
1	Consumer App shall be available in both Android and IOS platform. It shall have following features Consumption Dashboard, Door Step Services, Bill Payment, Option for multiple accounts, Guest login features	YES		
2	Access of 'Quick Bill Pay' where the consumer may pay the bill on the go by furnishing only the consumer id; multiple bills may be paid by this option	-	Yes	
3	Consumer may apply for and check the status of New Connection/Additional/reduction load application	-	Yes	
4	Consumer may access his personal details like Assessment, consumption & bill paid for the last 3 years, and so on; more than one customer id (if any) may be added to a registered account	-	Yes	
5	Consumer may access the consumption calculator to check the energy consumption patterns.	-	Yes	
6	Fresh complaints can be lodged and previous complaints tracked via the app	-	Yes	
7	Consumer App shall support smart meter interface. Consumer App shall have In home display where the near real time parameter of the meter display should be visible	Yes		
Consumer may also request for:		-	yes	
1	Request Duplicate Bill	-	Yes	
2	Augmentation of load / regularization for installation of AC	-	Yes	
3	Informing non-usage of electricity during a certain period of time due to absence	-	Yes	
4	Registration of mobile no., email-id, DOB	-	Yes	
5	Energy calculator	-	Yes	
6	e-Bill registration	-	Yes	

7	One touch call / e-mail facility	-	Yes	
8	Reporting of cases of theft through the App	-	Yes	
9	The consumer can stay updated with regard to the company, new launches, services, outages, useful tips, through social media tabs for Facebook, Twitter, and WhatsApp which are available in the App	-	Yes	
HT consumers can get the following through the App:				
1	A summary of their account details are available here	-	Yes	
2	Latest Bill along with the amount to be paid and the due date can be viewed	-	Yes	
3	Payment History of the last 12 months are available in the app	-	Yes	
4	Consumption history of the last 12 months are available in the App	-	Yes	
5	All the features of the consumer web self-services shall be available on the mobile app.	-	Yes	
Mobile App for Field Work Force:				
1	The android Smart Phone is expected to be a very important tool through which various activities of the utility are expected to be carried out.			
2	The proposed app should be developed with role based access to users (Consumers, Discom Official and Feeder In charge & Meter Reader.	-	Yes	
Following features will be required in the Apps system.				
3	For Consumer- View & Download bill, Billing history, Bill payment, Receipt & Payment History, Lodge Complaint, Grievance status tracking	-	Yes	
4	For Discom Officials- Monitor billing progress, revenue realization, consumer billing history, payments and location on Google map.	-	Yes	
	Instant alerts (Group Messaging)			

5	feature to the individual/group, Supply alerts on selected criteria (33 and 11KV Feeder, Village, Binder, Tariff Category, DTs etc.)	-	Yes	
For Feeder In charge & Meter Reader-				
6	Data capturing (Feeder wise GPS location of DTC, Pole, Consumer & indexing with feeders)	-	Yes	
7	Meter Reading directly from Meter through Optical Port and generation of billing and cash collection at spot.	-	Yes	
8	On spot updating of activities such as Meter Change, Disconnection, Reconnection and photographs as proof of completion of activity	-	Yes	
9	Disconnection and reconnection module giving information about the arrears pending and route map for tracing the location of consumer premises.	-	Yes	
10	Capturing the Disconnection and Reconnection details.	-	Yes	
11	Capturing of Field inspection details in new connection process.	-	Yes	
12	Capturing the location wise asset details during asset replacement/repair for assets like Feeders, Meters, CT/PT, Transformers etc.	-	Yes	
13	Tracing the location of Meter reader /Feeder In-charge by sub division officers on real time basis	-	Yes	
14	These apps should be capable of display of information on a Google Map on the Smart Phone.	-	Yes	
15	Capturing various feeder information: The bidder shall capture the feeder information in a hierarchal manner as per the format to be provided by the Discom at the time of award of contract.	-	Yes	
16	The app should be able to capture any other information in the forms published by the MIS reporter	-	Yes	

	enabling the officers to key in the details and view the same on drill down formats.			
	Web Based Information and Monitoring Systems with Mobile App for Officers			
1	Agency shall develop an application which include feature of both Web-App and Mobile App for Discom Officials.	Yes	-	
2	Agency shall have to design the proper analytic computations for various other fields.	-	Yes	
3	The Information shall be compiled at various levels and adequate dashboard for various levels shall be created.	-	Yes	
4	The information shall be collated in the intermediate database server which shall be taken up by Agency.	-	Yes	
	Other application required to be loaded on ANDROID Based Mobile Devices			
1	Capturing details of asset replacement like Meter, Transformer, CT/PT etc.	-	Yes	
2	Estimation of bill of material during new connection process.	-	Yes	
3	Consumer complaint and theft / un-authorized use, recording/photography	-	Yes	
4	Communication module to exchange real-time messages between the subdivision and device.	-	Yes	
5	Mobile app for MIS Information	-	Yes	
6	Mobile App's for displaying the information with required functionalities obtained by integrating with existing systems	-	Yes	
7	MRT Mobile App shall have following features App should have level wise logins for testing officers i.e. Sub-Division, Division, Circle	Yes		

	<p>It should have three JIR testing formats.</p> <p>Should be able to record all the parameters required to create MTR report.</p> <p>It should have the feature to download the reports in PDF format so that same can be shared to consumer at site using mail/whatsapp etc.</p>			
9	<p>Bidder shall provide GIS survey app with following features</p> <p>Data capturing (Feeder wise GPS location of DTC, Pole, Consumer & indexing with feeders)</p> <p>These apps should be capable of display of information on a Google Map on the Smart Phone.</p> <p>Capturing various feeder information: The bidder shall capture the feeder information in a hierarchal manner</p> <p>GIS survey app should capture the important parameters of the assets</p> <p>App should capture Photo of the asset (DT, Pole and consumer location) etc.</p> <p>The captures information should be able uploaded to GIS system.</p>	Yes		
10	Any other apps as desired from time to time by Discom shall be developed by the bidder without any extra cost.	-	Yes	
	Energy Audit			
	The Software shall have exhaustive Energy Audit features that is:			
1	<p>The Software shall have features to link the consumer to DTC, DTC to Feeder and Feeder to Sub Station. The required coding convention in consultation with the DISCOM has to be adopted so that each consumer at a DISCOM level have a unique code.</p>	Yes	-	
	The software shall facilitate bulk upload based network assignment			

2	and realignment. That is the data for the realignment or alignment shall be provided in XLS sheets and the same shall be uploaded and the linking should get updated.	-	Yes	
3	The system shall be able to abstract Energy sent data from respective systems and display it on the Dash Board.	-	Yes	
3	The system shall enable capturing of consumption recorded at DT, Feeder, Sub Station, Boundary meters for arriving at the Total Energy Input at various hierarchies for calculation of energy losses.	-	Yes	
4	The Energy audit reports as per the formulas provided shall have facility to arrive at the assessed energy if any as specified by DISCOM.	-	Yes	
5	The Drill Down Energy Dashboard shall facilitate drill down up to DTC from the Corporate Level.	-	Yes	
6	The module shall have various standard and adhoc reports for displaying the energy losses at various levels.	-	Yes	
7	The module shall facilitate merging of feeders, splitting of feeders based on the input file provided.	-	Yes	
8	The module shall facilitate import or consumption related details from third party existing systems and the AMI/SCADA systems, Revamped Reforms Based and Results Linked Distribution Sector Scheme, IPDS schemes etc. that may be deployed by JDVVNL during the contract tenure.	-	Yes	
9	The Software shall facilitate integration with existing and future feeder monitoring system, vigilance app Urja Sarthi app or any other app and other systems of JDVVNL and future systems that shall be deployed for AMR/AMI, RT-DAS or revamping schemes.	-	Yes	

10	The data obtained for all the monitoring points shall be consumed for energy audit and the audit details shall be made available for display of the same in dashboards, pre-defined reports, graphs, pushed to mobile apps, published on portals, exchanged with central and other state agencies as and when authorized and intimated by JDVVNL.	-	Yes	
11	The energy audit parameters and details shall also be displaced on google maps/GIS maps with various options and filters for display.	-	Yes	
	Meter Data Information System			
1	The system shall support storage, archiving, retrieval & analysis of meter data and various other MIS functionalities along with validation & verification algorithms. It shall act as a central data repository. The system shall have capability to import raw or validated data in defined formats and export the processed and validated data to various other systems in the agreed format. It shall support built-in analytics & reporting and shall provide validated data for upstream systems such as Billing, Consumer Information System and Customer Care, Outage Management etc. The system shall be capable of supporting third party Pre-payment options.	-	Yes	
2	The System shall also support the future requirement of utility regarding AML.	-	Yes	
3	A robust and scalable system solution is required for accepting, validating, and processing of non-AMI/legacy meter data taken manually, through Android Smart	-	Yes	

	phones etc., from conventional and AMR meters with scale-up provisions. Subsequently, integrating multiple AMI Head end systems would be needed when Jodhpur Discom rollout Smart Meters commercially.			
4	Meter data collection and data management (Direct or from third party system)	-	Yes	
5	Meter data processing and generation of billing determinants for all types and category of consumers, including Net-metering and open access consumers.	-	Yes	
6	Maintaining a single meter data repository catering to different HES / MDAS	-	Yes	
7	Supporting VEE (Validation, Estimations and Editing). Real-time validations shall ensure ready-to use meter data.	-	Yes	
8	Integration to Utility / Third party Consumer portal / mobile apps	-	Yes	
9	Universal calculation engine with mathematical, logical and statistical operators	-	Yes	
10	Built-in Analytics / Reporting feature	-	Yes	
11	Exception management and Service Order generation	-	Yes	
12	Capability to support Net-Metering billing	-	Yes	
13	Ability to interface third party Prepayment application	-	Yes	
14	Theft and revenue loss identification through usage pattern and through drop in consumption.	-	Yes	
15	Capability to identify 'No consumption', 'Drop in consumption', 'Abnormal usage pattern', 'Irregular consumption pattern' and advance of registers in case of disconnected / not in use cases.	-	Yes	

16	Capability to identify consumers with higher energy consumptions and consumers with lower energy consumptions, area wise / DT wise / category wise.	-	Yes	
17	Analysis on maximum, moderate and minimum sale of electricity, area wise / DT wise, for growth analysis and subsequent network planning.	-	Yes	
18	Perform load analysis for different groups and categories of consumers.	-	Yes	
19	Analysis of VEE exceptions based on severity and other business rules.	-	Yes	
20	Analysis of Smart meter rollout progress to help senior management track the progress.	-	Yes	
21	Analysis of Smart meter events & activities performed.	-	Yes	
22	Analysis of quality & timeliness of interval data received	-	Yes	
23	Management Information System Dashboards & reports	-	Yes	
	A. Development of Management Information System			
1	Field officers from the level of Feeder in charge to the zonal CE can provide key parameters/information on predefined manner to the system through mobile app and web app.	-	Yes	
2	The system after receipt of all such information shall compile and consolidate in a customized/specify formats and publish through report builder.	-	Yes	
3	Frequency and number of reports which is possible through the input data on combination and permutation techniques can be customized through system as per specific user requirement.	-	Yes	
Features of the system shall be:				

1	Agency shall develop an Application which include feature of both Web-App and Mobile App for Discom Officials.	-	Yes	
2	The Application shall be based on the four pillars:	-	Yes	
	Information provided by the Field Level Officers through this Application Information extracted from the existing database servers of Discom Information which is provided as targets by the	-	Yes	
	Corporate Office through this Application d. Information which is computed through information provided in (a), (b) & (c) i.e. analytics through What-If (Scenario Analysis)			
3	The mechanism for monitoring of Central and State Government Schemes shall also have to be done in discussion with Discom which means formats of these schemes and filling of information as per point 2 above for these schemes.	-	Yes	
4	The Agency shall develop a feature in Application which will enable filling of information in set time periods for field level officers and target to be filled by Corporate Office.	-	Yes	
5	Level of approval shall be added for the information from the field before being integrated to the total system.	-	Yes	
6	Agency shall have to design the proper analytic computations for various other fields.	-	Yes	
7	The Information shall be compiled at various levels and adequate dashboard for various levels shall be created.	-	Yes	
8	The information shall be collated in	-	Yes	

	the intermediate database server which shall be taken up by Agency.			
	B. Reporting System & Dashboards	-	Yes	
1	The web based system shall have dashboards that depict the various key performance parameters at various levels based on the user on real time basis in a hierarchy structure.	Yes		
2	The web based system shall have an BI tool for report design. Designed report should be able to publish in the application.	Yes.		
3	A complete list of the existing and required MIS reports shall be provided to the finalized bidder for assessment.	-	Yes	
4	Further the Agency has to provide or implement any other reports, dashboards etc., as required by the DISCOM during the contract period.	-	Yes	
5	The web based application shall have provision for custom report builder which shall facilitate users to define and generate the reports.	-	Yes	
Bidder shall provide a separate reputed BI with Report Builder in the system with following features			-	Yes
A	Capex Planning for DTR with everyday monitoring module	-	Yes	
B	Module for Customer Profiling	-	Yes	
C	Root Cause analysis for repetitive customer complaints	-	Yes	
D	Monitoring and predictive modules for Losses	-	Yes	
E	Module for effective customer call grouping.	-	Yes	
F	Dashboard for daily / monthly monitoring by Management	-	Yes	
6	Module for effective control over material consumption for faults / new	-	Yes	

	connections etc.			
7	Module for effective reduction in customer footfalls	-	Yes	
8	Dashboard to analyse customer growth, complaints & its duration etc. and operator shall be able to analyse this on map.	-	Yes	
9	Dashboard for high-level overview of arrears, collectibles, writeoffs data, pay plans, and payment arrangements for the selected period.	-	Yes	
10	The Application shall have the features for building custom forms for gathering information for periodical review by management and for displaying on mobile and Web. The various forms shall be designed, developed and deployed from time to time and published for entry/key in at various levels.	-	Yes	
11	The information collected from the various published forms shall be stored hierarchically and consolidated reports automatically formed at various hierarchy levels of sub division, division, circle, zone etc.	-	Yes	
12	The reports and dashboards shall have drill down features to drill down to the nth level.	-	Yes	
13	The forms shall be responsive and shall be accessible from any device like Mobile Phone, Tablets, Desktops etc.	-	Yes	
	Business Intelligence Tool (BI Tool) The system shall have BI tool for report design and report publishing.	Yes		
	External / Internal Audit System			
1	The system shall have facility to provide a Dashboard/UI for Revenue Audit by external and internal audit for various revenue and billing information's at sub	-	Yes	

	divisions and other offices.			
	The system shall be capable to prepare the observation including undercharges, mainly the following records are to be checked and audited:	-	Yes	
	i. Checking of physical cash balances.	-	Yes	
	ii. Checking record of cash section. Form A-9, PCCB/Scroll and PCB, timely remittances of money collected and reconciliation with bank statement.	-	Yes	
	iii. Checking of output 6-A, B, C & D with stubs/ Scrolls & to report suspicious cases of embezzlement/ financial irregularities.	-	Yes	
	iv. Reconciliation of amount received through PCCB and posted against consumer A/c as per MIS.	-	Yes	
	v. Checking of debit raised or not in cases of dishonoured cheques along with LPS and Bank Charges.	-	Yes	
	vi. Whether cash collection is done by outside agencies, if yes, intimate name of Kiosk (under e-mitra/CSC) and DeGS where receipts to consumers are issued by affixing rubber stamp in place of computerised receipt.	-	Yes	
	vii. Checking of consumer ledger with binder &/or other related records.	-	Yes	
	viii. Checking of CC&AR registers for unauthorised/irregular debit/credit causing financial loss to the Nigam.	-	Yes	
	ix. Checking of deficiencies in input advice and output reports related to billing i.e. CB-4, CB-12 & CB-15 with 16 ABC output reports etc.	-	Yes	
	x. Checking of left out outstanding and negative balances against the consumers.	-	Yes	

	xi. Detailed audit of mobile tower connections and ensuring correct billing thereof.	-	Yes	
	xii. Ensuring 100% transfer of Master Data as well as outstanding from one billing agency to another or transfer from one sub-division to another/new created sub-division (if applicable).	-	Yes	
	xiii. Compliance of DCO's, MCO's & RCO's and pendency of LR & SR in billing in case of meter change.	-	Yes	
	xiv. Checking of billing of temporary connections.	-	Yes	
	xv. Checking of debit raised / average charged in case of stopped / defective meters, theft, malpractices cases and other charges in view of compliance of A-30 Nigam's orders and arrange to propose debit in consumer's account.	-	Yes	
	xvi. Correctness of billing in view of Nigam's TCOS, tariff and circulars / orders issued time to time.	-	Yes	
	xvii. Irregularities in the records of HT (other than large industrial power consumers), MIP and SIP consumers.	-	Yes	
	xviii. Checking of M/F as per JIR of consumers who are being billed on power factor basis.	-	Yes	
	xix. Detailed audit of SIP, MIP and other category consumers having sanctioned/ connected load 25 HP (18.65 kW) or above and MDI has exceeded 50kVA thrice in a financial year and under assessment their against.	-	Yes	
	xx. Checking of billing of load extension / reduction cases.	-	Yes	
	xxi. Under charges for any irregularities noticed during audit period in case of a consumer will be made for whole period irrespective of audit period.	-	Yes	
	xxii. Checking of A-49 register in			

	reference to pendency of SCOs for compliance, pendency of SCOs for billing, delay in issue of first bill and breach of priority in release of connections.	-	Yes	
	xxiii. Checking of VCR cases for assessment & logical conclusions thereof.	-	Yes	
	xxiv. Checking of register maintained for settlement of dues along with implementation of decisions.	-	Yes	
	xxv. Verification of pendency of SOSD & compliance of previous ICR.	-	Yes	
	xxvi. The amount charged to the consumer is to be got debited in their accounts through CC&AR. Number and date of the same is to be recorded in SOSD sheet duly signed from AEN and ARO of the sub division concerned.	-	Yes	
	xxvii. Any other works related to revenue audit assigned by the Management.	-	Yes	
	System Support with Ticketing	-	Yes	
1	The Web based software should have user manuals and centralized ticketing system for Support.	Yes	-	
2	The application users shall have provision to raise tickets, a unique ticket number shall be assigned.	-	Yes	
3	The web based application shall have tools to track the ticket number for status update and resolution.	-	Yes	
4	The web based application shall have configurable escalation matrix inbuilt for escalation of support issues.	-	Yes	
5	The web based application shall have dashboards and MIS on the ticket status and resolution.	-	Yes	
	Special Features & Conditions	-	Yes	
	Data exchange with other systems			

1	The proposed solution shall be capable to exchange the database information with existing RAPDRP software and upcoming new ERP system on continues basis so as to enable Discom to have a common MIS. MIS data has to be updated within 6 Hrs of completion of day i.e. post mid night and before 6 A.M.	-	Yes	
2	The Software shall have interfaces to integrate with online payment gateways, third party payment systems like e-mitra and energy audit system. The system shall be built SOA, using standard set of technical specifications of web services and can be integrated with any system.	-	Yes	
3	Middleware in the form of Hardware, Software or firmware if required, shall be deployed by Agency as part of scope of work to integrate with the existing and upcoming new system in full-fledged data sharing and as touch points.	-	Yes	
4	B. SMS and Email Alerts: The web based application shall have in built features for sending SMS and email alerts to users based on the requirement of the DSICOM. The required SMS and email gateways shall be provided by DISCOM. DISCOM desires to send alerts on various events to consumers like meter reading, bill generation, due date, payment reminder, payment collection, disconnection, supply / shutdown alerts etc.	-	Yes	
	The application shall be accessed over secure internet through SSL certificates. Latest encryption technology shall be used for securing the data transmission and access by multiple users	-	Yes	
	The data architecture, Table			

1	Structure, Triggers, Stored Procedures, and Scripts used should be shared with DISCOM. Any manual update on the live system shall be approved by DISCOM and results of change should be shared / communicated with DISCOM. DISCOM shall be the absolute owner of the data. The administrator rights with the password shall be handed over to DISCOM. The Web based software should be accessible over the internet (broadband) and shall be designed to work on low band width and. The software shall have minimum possible response times for data access, report generation and data queries as per industry standards and approved by DISCOM. The software shall be scalable and there should not be any restriction on the number of users/consumers with compromising the response time. All the Licences shall be in the name of Jodhpur Discom as per work order.	-	Yes	
2	The system shall be sustainable and certain tests shall be carried out from initial stage to final acceptance stage. Further regression test shall be carried out whenever there is change in tariff or business logic.	-	Yes	
3	Two factor authentication system shall be implemented i.e. both password and biometric. The supply & maintenance of required biometric devices at the all the levels shall be in the scope of bidder. For critical transactions OTP based approval system in addition to the above shall be implemented. All transactions shall be logged and have tow stage authentication i.e. marker and	-	Yes	

	approver.			
4	System should be capable to generate consumer Pass Book indicating Bill issued, payment made, and Security Deposit. This Pass Book shall be available for entire year indicating all transactions made during the year by the consumer.	-	Yes	
5	As the system has been provisioned with BI & report builder Tool, there shall be no limitations. The system has been designed in such a way that on the basis of input received per billing / or other system. This system can be utilized to deliver different reports.	-	Yes	
6	The system's shall have provision to handle start-to- end all aspects of the customer life cycle i.e. from the service connection, meter reading, and field work to rating, billing, payments processing, and collections and delivery of comprehensive contact centre capabilities, customer relationship management etc. The system is intended to usher in transparency and customer delight. The system shall have secure, flexible, scalable, adaptable for future requirements of Discom. It should ensure billing accuracy, quickly comply with new regulatory mandates, track payments, credit and collections activities easily, minimizing write-offs, offer extensive and user-friendly customer services and help the Discom with rich analytics to stop leakages and bring down techno-commercial losses rapidly.	-	Yes	
7	Training to be imparted to the designated DISCOM personnel of the system and its operation. Onsite Training has to be imparted to at least Two Ledger Keeper,	-	Yes	

	One ARO and three JENs, One AEN at each Sub Division.			
8	Printing of Ledgers, DC Notices, Outstanding List, PDC List, Weekly reports, Monthly reports and Quarterly reports, MIS reports and delivering to the respective Accounts Officer.	-	Yes	
9	Any other incidental service that is required for achieving the objectives as per the tender specifications.	-	Yes	
10	Integration: The system to be deployed under this contract shall be SOA (Service Oriented Architect) based and shall be considered as master of Feeder Monitoring System, Mobile Application and accordingly shall be integrated with the same and also with RAPDRP system and forthcoming future system (during currency of Contract) for which necessary catalogue services of RAPDRP system shall be provided by Discom. All the middleware in the form of Hardware, software & firmware required for such integration shall be deployed by agency as part of scope of Work with no additional cost to Discom.	-	Yes	
1 1	The requisite Middleware has to be deployed by bidder and it should be interoperable with RDBMS and other sub components.	-	Yes	
1 2	O. A comprehensive list of generic functionalities required in the Billing Software has been specified in the document. However, the Agency has to take into consideration the various central and stage government IT initiative that are being carried out or intended to be carried out and develop the additional modules or features as and when inputs/requirements are provided during the contract	-	Yes	

	period. Agency shall do the detailed requirement gathering to figure out the exact requirement in accordance with the above recommendations. No additional payment or charges shall be claimed either for grounds up development or for change management requested			
	Centralized Customer Care System			
1	The bidder / shall provide state of art and highly modern CCC application fully integrated with the revenue management system in whole.	Yes		
2	The CCC application should support complaint lodging facility through various means like IVRS, mobile app, consumer information system, social media, etc.		Yes	
3	The CCC application should have features for complaint escalation at various levels of the Discom.		Yes	
4	The CCC application should be able to generate various reports and access shall be available to designated officers of the Discom through web portal / mobile app.		Yes	
5	Bidder shall provide a responsive consumer portal for registering and tracking complaints		Yes	
6	CCC application shall provide shift Management for CCC operators		Yes	
7	CCC application shall have automatic routing configured based on the office and type of complaint.		Yes	
8	CCC application shall provide Comprehensive dashboards for key KPIS related to complaints.		Yes	

8 OUT PUT AND MIS REPORTS:

S. No.	Name of Report	Frequency	Hard / Soft Copy
1	PDC Consumers List	Quarterly	Soft Copy
2	Amnesty Notice	Yearly	Hard Copy
3	Consumer Annual Ledger	Quarterly	Soft & Hard Copies
4	Annual Ledger for Subdivision	Annual	Soft & Hard Copies
5	Output-4. Disconnection Notice Cum Order	Weekly	Hard Copy
6	Output-5.Consumer Ledger Summary	Weekly	Hard Copy
7	Output6(A) Date Wise Payments	Weekly	Soft Copy
8	Output6(B)Payments Summary	Weekly	Soft Copy
9	Output6(C) Un-Posted	Weekly	Soft Copy
10	Output8(A). Outstanding More Than 500 And Upto 5000	Weekly	Soft Copy
11	Output8(B). Outstanding More Than 5000 And Upto 10000	Weekly	Soft Copy
12	Output8(C). Outstanding More Than 10000	Weekly	Soft Copy
13	Output9. Summary of Energy Billing	Weekly	Soft Copy
14	Output4.Dc Notice Summary	Weekly	Soft Copy
15	Output5. Consumer Ledger Summary	Weekly	Soft Copy
16	Output16(A). Cb-4 List of Sundry Charges Credited/Debited	Weekly	Soft Copy
17	Output16(A). Cb-15 List of Sundry Charges Credited/Debited	Weekly	Soft Copy
18	Output16(C). Cb-12 List of Sundry Charges Credited/Debited	Weekly	Soft Copy
19	Output19. List of Newly Sanctioned Installations	Weekly	Soft Copy
20	Output20/21. Delay in Issuing of New Connection	Weekly	Soft Copy
21	Output22&23. List of Connections Lying Disconnected for > 2 Months and Sr Not Removed	Weekly	Soft Copy
22	Output26. Premises/Meter Locked for More Than 2 Months	Weekly	Soft Copy
23	Output26(A). List of Defective Meters	Weekly	Soft Copy
24	Output25. Variation of Energy	Weekly	Soft Copy
25	Output26(A). List of Defective	Weekly	Soft Copy

S. No.	Name of Report	Frequency	Hard / Soft Copy
	Meters, age wise		
26	Output26(B). List of Burnt Meters age wise	Weekly	Soft Copy
27	Output26(C). List of Stopped Meters age wise	Weekly	Soft Copy
28	Output26(D). List of Broken Glass Meters age wise	Weekly	Soft Copy
29	Output26(E). List of Faulty Meters age wise	Weekly	Soft Copy
30	Output26(F). List of Body Seal Broken Meters	Weekly	Soft Copy
31	Output26(G). List of Consumers Who's Reading Not Received	Weekly	Soft Copy
32	Output26(H)-List of Consumers Having Area Without Supply & Display Out	Weekly	Soft Copy
33	Output32. Notice for Enhancement of Security Deposit	Weekly	Soft Copy
34	Output36. List of Zero Consumption Consumers	Weekly	Soft Copy
35	Output37. List of Unauthorized consumers including Illegal Restoration of Supply by Consumers	Weekly	Soft Copy
36	Output38. List of Doubtful Cases	Weekly	Soft Copy
37	Output39. Consumer Billed On Average but Consumption More Than Average	Weekly	Soft Copy
38	Output40. More Than One Payment	Weekly	Soft Copy
39	Output41. More Than One Sundry	Weekly	Soft Copy
40	Ledger Wise Monthly Outstanding	Weekly	Soft Copy
41	Ledger Wise Monthly Govt. Outstanding	Weekly	Soft Copy
42	MIS	Monthly	Soft & Hard Copies
43	Output 10-Summary of Consumers Not Billed and Billed On Average Basis	Weekly	Soft Copy
44	Output 10a-Age wise Abstract Summary of Defective/Lock Meter Consumers	Weekly	Soft Copy
45	Output 14-Category Wise Month End Position of Assessment	Weekly	Soft Copy

S. No.	Name of Report	Frequency	Hard / Soft Copy
	Realization and Arrears		
46	Output 15a-Age Wise Analysis of Arrears as on Month End	Weekly	Soft Copy
47	Output 15b-Analysis of Realization	Weekly	Soft Copy
48	Output 18a-Feederwise Consumption Analysis – Non Agriculture	Weekly	Soft Copy
49	Output 18b-Feederwise Consumption Analysis- Agriculture	Weekly	Soft Copy
50	Output 18c-Feederwise Summary of Energy Sold, Assessment, Realization & Outstanding	Weekly	Soft Copy
51	Sub Division and Division Wise-18abc	Weekly	Soft & Hard Copies
52	Circle Wise-18abc	Monthly	Soft & Hard Copies
53	Output 27-List of Consumer Whose Recovery to be Deferred as Per Court's/ Settlement Committee's Order	Monthly	Soft Copy
54	Output 28-List of Defaulting Consumer's Whose Recovery of Outstanding Under Installment	Monthly	Soft Copy
55	Output 29-Manufacture Wise Report of Working Condition of Meter	Monthly	Soft Copy
56	Output 31-List of Change of Defective, Stopped and Burnt Meters More Than Twice in Last 12 months	Monthly	Soft Copy
57	Output 33-List Showing Balance of Advance Deposit and No. Of Installment Due to Be Allowed	Monthly	Soft Copy
58	Output 34-Energy Billing Assessment & realization Summary for the Month	Monthly	Soft Copy
59	Output 35-Statement of Showing the Levy of Power Factor Surcharge/Incentive Allowed on Power Factor	Monthly	Soft Copy
60	5%Rebate Allowed Due to Meter Remain Defective /Stopped More Than 2 Month & Amount Capacitor Surcharge Levied	Monthly	Soft Copy

S. No.	Name of Report	Frequency	Hard / Soft Copy
61	List of consumers having power factor less than 0.75	Monthly	Soft Copy
62	1.Metered Consumers Billed on Average Basis	Monthly Reports For Circle, Sr.AO (Zone), CAO (B&R)	Soft Copy
63	2.Summary of Consumers Billed on Average Basis		Soft Copy
64	3.Agewise Summary of Defective Meters		Soft Copy
65	4.Agewise Summary SDO-code Wise		Soft Copy
66	5.Output 35 Power Factor		Soft Copy
67	6.Annexure A, Minimum Charges		Soft Copy
68	7.Tariff Subsidy Domestic and Agriculture		Soft Copy
69	8.Cycle Wise Ed Assessed		Soft Copy
70	9.Defective ABS SDO-wise		Soft Copy
71	List of Consumers whom Rebate has been given.		Soft Copy
72	List of UDR Notice and LRF Notice		Soft Copy
73	Energy Audit Report for 33kV Feeders in Urban & Rural Areas	Monthly reports for Sub-Division, Division, Circle, Zone, Discom	Soft & Hard Copies
74	Energy Audit Report for 11kV Feeders in Urban Areas and Rural Areas		Soft & Hard Copies
75	Energy Audit Report for Distribution Transformers in Urban Areas		Soft & Hard Copies
76	Energy Audit Report all Industrial Areas		Soft & Hard Copies
77	Various Report required by PFC as per Post Go-live reports under R-APDRP Project	Monthly reports for Sub-Division, Division, Circle, Zone, Discom	Soft Copies
78	Report as per Senior Officers Meeting (SOM) formats	Monthly reports for Sub-Division, Division, Circle, Zone, Discom	Soft Copies
79	Reports as per requirement of State/ Governmental Requirement time to time (Common format shall be shared by JODHPUR DISCOM as per requirement) and reports for	Monthly reports for Sub-Division, Division, Circle, Zone, Discom	Soft & Hard Copies

S. No.	Name of Report	Frequency	Hard / Soft Copy
	various Government Portals like National Power Portal etc.		
80	Any other report e.g. NPP report, Monthly Review Format Report Consumer tagging report, Network Indexing Report, Security Deposit Report etc. or any additional report as and when required by Discom.	Monthly reports or as per requirement for Sub-Division, Division, Circle, Zone, Discom	Soft & Hard Copies
81	QIS	Quarterly	Soft & Hard Copies

Note: Circle Wise MIS report format shall be given after the award of the contract.

Some Sample Data Analytics Reports are given as below for reference:-

- Category wise phase wise trend of Average, provisional billing cases (Month wise comparison, Bar Chart / Line Chart). This should be span as per hierarchy top to bottom.
- Category wise, Phase wise Govt & Private, average billing consumers.
- Hierarchy, Category wise monthly/yearly consumption, assessment, realization, comparison trend.
- Generation of Report for Meter change two or more time in last 1 & 2 year (period as per user), phase wise, Category Wise & Circle/Division/Sub-division wise.
- Sub-division wise, Consumption variation downward more than 30 or other percent in comparison to PAU OR LAST SIX MONTH OR CORRESPONDING MONTH
- Chart for showing monthly % (percentage) increase/decrease in consumers / complaints /
- Circle/Division/Sub-division wise feeder wise, Consumer with zero consumption, Less than 30 units (Units as per user)
- Circle/Division/Sub-division wise, Category Wise List of doubtful consumer on the basis of low consumption/load basis (all three parameters i.e. category, consumption, load should be configurable)
- List of consumers whose consumption is being decreased continuously for last 2 or 3 or more months (User defined Criteria)
- Generation of Feeder wise category wise defaulter Consumers
- Circle/Division/Sub-division wise, List of high values 10 or 100 Consumer on the basis of amount/units
- SDO WISE Binder wise comparison of consumption with corresponding month
- Sub-division wise, consumption of last 6,9,12 months for specific category & PAU & load with master column selection option
- Sub-division Wise, consumer wise payment deposited in last 1 or 2 years with total units
- Circle Wise / Division Wise/ Sub-division Wise, Consumers whose billing is Provisional or Average, More than 2 or 4 or 6 months in a user defined period from to months.

- Similar Industry type / business type wise load wise consumption variation Report
- Circle Wise, Division Wise, SDO Wise, every month comparison chart of total Meter change, bill Correction, sub-division sundry etc. Phase wise & Category wise filtration is required.
- Month wise assessment, realization current month, realization up to month, trend SDO WISE, division wise, circle wise. This should be span as per hierarchy top to bottom.
- Lock/Defective billing trend, Circle wise SDO wise (increasing SDO circle)
- Payment not done since date of connection with dynamic conditions connection release before 4/6/8 month or connection released from specific date.
- Payment not deposited in last one year or last 6 month, as per user defined date or months.
- Monthly comparison/percentage of various Modes of Payment E-Mitra, Nigam Counter, Online in respect of total consumers / total amount
- Reports are also required for all the master correction from to for various business processes. E,g, Load / Tariff / MF/ reading correction / CD/ Name Change / Personal Data Correction/MCO etc.

11. NEW CONNECTION REPORTS

S. No.	Requirement	Frequency	Hard / Soft Copy
1	Application Pendency Report	Monthly Reports (In-Detail, In-Summary) Tariff wise, Load wise, Reading date wise, Consumption pattern wise, Sanctioned load wise, Consumer wise, Date range wise, Month wise, MR wise, Sub-division wise, Division wise, Circle wise, Zone wise, DTC wise, Feeder wise,	Soft Copy
2	New connections serviced		Soft Copy
3	Temporary connections serviced		Soft Copy
4	Addl. Load serviced		Soft Copy
5	No. Of load reductions		Soft Copy
6	Merging of installations		Soft Copy
7	Bifurcation of installation		Soft Copy
8	Name change		Soft Copy
9	Tariff change		Soft Copy
10	Rebates sanctioned		Soft Copy
11	DTC's Added		Soft Copy
12	DTC's Removed		Soft Copy
13	Feeders added		Soft Copy
14	Feeders removed		Soft Copy
15	Stations removed		Soft Copy
16	Stations added		Soft Copy
17	Installations surrendered		Soft Copy
18	Installations permanently disconnected		Soft Copy
19	Installations serviced with meters – consumer borne		Soft Copy
20	Installations serviced with meters – company borne		Soft Copy
21	Installations serviced without		Soft Copy

S. No.	Requirement	Frequency	Hard / Soft Copy
	meters	Sub-Station wise, Town wise, Constituency wise, other Hierarchy Wise on demand.	
22	No. Installations regularized		Soft Copy
23	Scheme wise installations serviced		Soft Copy
24	Capacity additions		Soft Copy
25	Sanctioned/ Connected load		Soft Copy
26	Any other report required as per JODHPUR DISCOM requirement		Soft Copy

Note : Discom may require similar Output/ MIS/ New Connection/ Other Reports as per requirements time to time in different other customised formats also which shall be provided by the successful bidder without any additional cost.

12.SPOT BILL FORMAT :-

जोधपुर विद्युत वितरण निगम लिमिटेड	
राज. कार्यालय नं. १०११ हाउस, जोधपुर-३४२ ००३ विद्युत उपभोग विभाग (उपभोक्ता प्रति) PAN-AAACR878R, GSTIN:09AAACR878R1Z3, IHS CODE: 2716, CEN: U40109RJ2000SGC016482	
क्र.सं.	सूचना का विवरण
CIN No. U40109RJ2000SGC016482 "BILL OF SUPPLY"	
भाग (क) : उपभोक्ता से संबंधित स्थायी सूचना MAR.-2021	
1	विल माह एवं तारी की तिथि
2	उपखण्ड का नाम व कोन नम्बर
3	खाता संख्या
4	कै. नम्बर
5	उपभोक्ता का नाम व पता
6	ग्राम जनगणना कोड
7	उपभोक्ता का मोबाइल नं.
8	उपभोक्ता का पैन नं.
9	उपभोक्ता का जीएफटी नं.
10	मार्ग निर्देशन संख्या
11	श्रेणी/टैरिफ कोड
12	संयुक्त पता (वि.पा./हा.पा.)
13	अवकाश/मीटर मूला राशि
भाग (ख) : ऊर्जा उपभोग संबंधित जानकारी	
14	वर्तमान पढ़ा तिथि व विल अवधि
15	गत पढ़ा तिथि
16	गत घण्टा (KWH)
17	वर्तमान पढ़ा (KWH)
18	मीटर नं./गुणांक
19	कुल उपभोग (यूनिट)
20	विद्युत खर्च
21	स्थाई शुल्क
22	किराया (मीटर/मीटर/ग्राउंड/मीटर)
23	अनाधिकृत उपभोग राशि
24	विद्युत शुल्क
25	नगरीय उपकर
26	जल संरक्षण उपकर
27	अन्य गणनीय (डिजिट/क्रेडिट)
28	निवेदन (ग्रामीण/विकल्प/नोकर)
29	कुल उपभोग राशि (क. 20 से 25 तक का योग)
30	पिछले विल तक बकाया राशि
भाग (ग) : सरकार द्वारा देय अनुदान तथा विद्युत विल भुगतान संबंधित जानकारी	
31	सरकार द्वारा अनुदान
32	निवृत्त तिथि तक देय राशि (28-30-31)
33	निवृत्त भुगतान तिथि
34	विलम्ब भुगतान सरचार्ज
35	निवृत्त तिथि परखात देय राशि

संक्षिप्त विभागीय सूचनाएँ			
1.	विजली सुविधाओं का अधिकतम एवं स्वरित लाभ पाने के लिए "बिजली मित्र एप" डाउनलोड करें।		
2.	विजली को बिलों का भुगतान निम्नलिखित माध्यमों से किया जा सकता है :- - नकद से विद्युत वितरण निगम के अधिकृत कर्मचारी (कौशियर/कौडर डेपॉजिट) को। - सम्बन्धित सहायक अभियन्ता अथवा सहायक लेखाधिकारी (सी.सी.सी.) जयपुर (केवल जयपुर शहर के उपभोक्ताओं के लिए) के नाम पर देय रेखांकित चेक/डिमाण्ड ड्राफ्ट। - ऑनलाईन भुगतान जयपुर डिजिटल की वेबसाइट से। - ऑनलाईन भुगतान पेमेंट गेटवे ऐप/ऐप्लीकेशन के माध्यम से। - ई-मिड कियोस्क के माध्यम से (केवल कम्प्यूटर द्वारा जारी रसीद ही मान्य होगी)।		
3.	विल से विवाद होने की स्थिति में पूरी राशि जमा करानी होगी। विवाद के समाधान उपरान्त अवश्यक समायोजन आगामी विल/बिलों में किया जाएगा।		
4.	इस विल में पुरानी बकाया राशि सम्मिलित किए जाने से पूर्व विल की बकाया राशि पर दिया गया विद्युत सम्बन्ध विच्छेद नोटिस निरस्त/अविध नहीं होगा।		
5.	विल का भुगतान नियत देय तिथि तक न करने की दिशा में विल राशि पर 2 प्रतिशत प्रतिमाह की दर से विलम्ब भुगतान अधिभार (Delayed Payment Surcharge) देय होगा।		
6.	भुगतान के लिए नियत की गई तिथि को सार्वजनिक/राजपत्रित अवकाश होने की दिशा में अगला कार्य दिवस ही नियत देय तिथि माना जाएगा।		
7.	अपानत राशि य मीटर सुरक्षा राशि की जांच कर ले, अनार पाये जाने की अवस्था में मय मूल रसीद सम्बन्धित सहायक अभियन्ता या सहायक राखम्ब अधिकारी से सम्पर्क करें।		
8.	विद्युत वितरण निगम से पत्र व्यवहार करते समय वर्तमान खाता संख्या या को नं. अवश्य लिखें।		
9.	विजली को बिलों का निवृत्त तिथि से 7 एवं 10 दिन पूर्व भुगतान प्राप्त होने के अवस्था में विद्युत शुल्क पूर्व बकाया प्रभार की राशि पर क्रमशः 0.15 एवं 0.35 प्रतिशत की प्रोत्साहन राशि के रूप में छूट आगामी विद्युत बिलों में प्रदान/समायोजित की जाएगी।		
10.	विद्युत अधिनियम 2003 की धारा 135 के अन्तर्गत विद्युत चोरी करना अपराध है, जिसमें जुर्माना न तीन वर्ष की कैद अथवा दोनों का प्रावधान है। निवृत्त तिथि तक भुगतान न करने पर उक्त अधिनियम की धारा 56 के अन्तर्गत 15 दिवस परखात विद्युत सम्बन्ध विच्छेद करने की कार्यवाही की जाएगी। भूलशुल्क लेनी देनी।		
11.	विद्युत जानकारी हेतु www.energy.rajabastha.gov.in/jvvn पर सम्पर्क करें।		

शिकायत दर्ज करवाने हेतु टोल फ्री नम्बर				
अथवा पर सम्पर्क करें अथवा				
पर वॉट्सअप या एस.एम.एस. करें।				
विद्युत उपभोग की दर				
अंणी	दर	प्रति यूनिट विद्युत शुल्क	(रूपये से) प्रतिमाह	
घरेलू			स्थायी विद्युत शुल्क	
प्रथम 50 यूनिट प्रतिमाह (BPL & Astha Card)	3.50	0.40	100/-	
प्रथम 50 यूनिट प्रतिमाह (Small Domestic)	3.85	0.40	125/-	
प्रथम 50 यूनिट प्रतिमाह	4.75	0.40	230/-	
51 यूनिट से 150 यूनिट प्रतिमाह	6.50	0.40	230/-	
151 यूनिट से 300 यूनिट प्रतिमाह	7.35	0.40	275/-	
301 यूनिट से 500 यूनिट प्रतिमाह	7.65	0.40	345/-	
500 यूनिट प्रतिमाह से ज्यादा	7.95	0.40	400/-	
अधरेलू (5kw तक)				
प्रथम 100 यूनिट प्रतिमाह	7.55	0.40	300/-	
101 यूनिट से 200 यूनिट प्रतिमाह	8.50	0.40	300/-	
201 यूनिट से 500 यूनिट प्रतिमाह	8.85	0.40	380/-	
500 यूनिट प्रतिमाह से ज्यादा	8.95	0.40	460/-	
अधरेलू (5kw से अधिक)				
प्रथम 100 यूनिट प्रतिमाह	7.55	0.40	135/- प्रकिवा	
101 यूनिट से 200 यूनिट प्रतिमाह	8.50	0.40	135/- प्रकिवा	
201 यूनिट से 500 यूनिट प्रतिमाह	8.85	0.40	135/- प्रकिवा	
500 यूनिट प्रतिमाह से ज्यादा	8.95	0.40	150/- प्रकिवा	
रोड लाईट	1 लाख से कम आवादी	7.55	0.40	115/- प्रति लाईट
	1 लाख से ज्यादा आवादी	8.10	0.40	145/- प्रति लाईट
कृषि मीटर	सामान्य	5.55	0.04	30/- प्रतिहावा
	अन्य	7.10	0.04	60/- प्रतिहावा
कृषि (फ्लैट)	सामान्य	7.45	4.25 प्रतिहावा	30/- प्रतिहावा
	अन्य	8.95	4.25 प्रतिहावा	60/- प्रतिहावा
लघु उद्योग	500 यूनिट प्रतिमाह	6.00	0.40	80/- प्रतिहावा
	500 यूनिट प्रतिमाह से ज्यादा	6.45	0.40	110/- प्रतिहावा
मिश्रित अंणी उद्योग		8.05	0.40	105/- प्रतिहावा
नोट :- स्थायी प्रभार की गणना पूर्व वित्तीय वर्ष के मासिक औसत उपभोग के आधार पर की जाती है।				

“बिजली की बचत ही बिजली का उत्पादन है”

विज्ञापन के लिए स्थान