

Restructured APDRP - Govt. of India Submission of DPR for Part-A

DPR Part A: Establishment of baseline data and IT applications for energy accounting/
auditing & IT based consumer service centre (excluding SCADA)

State	Madhya Pradesh
Name of Utility	XVZ Distribution Utility
Project Area Name	PQR Town
IT Consultant under R-APDRP	ABC Consulting Firm
Location of Data Center	PQR Town

Submitted to

POWER FINANCE CORPORATION LTD.

Detail Project Report - Town with Data Centre

DPR No./Version	Part-A 001/Utility/ v1
Date of Submission	January 1, 2009

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Date of Submission of Proposal	#Date	January 1, 2009
DPR No./Version	Code	Part-A 001/Utility/ v1
Current Financial Year	FY	
Proposed Project Start Date	#Date	
Proposed Period of Completion	Months	

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Modifications

1 Part I: Guidelines for Part A (Guideline 20):-

Utility shall submit DPRs of all Project Areas (Towns) preferably together to Nodal Agency (PFC) for approval of Steering Committee.

2 Part I: Guidelines for Part A (Guideline 24):-

Utility will ensure ring-fencing of the proposed Project Area (Town) through metering of all import/export metering points and segregation of agriculture feeders within 16 weeks of the sanction of DPR.

3 Part I: Guidelines for Part A (Guideline 37) & Section 5.10 (Note **):-

Cost of boundary meters, installation and commissioning for ring fencing and system metering including 11/22/33 kV Feeders emanating from 220/132/110 KV Sub stations (if required for bringing them under AMR Implementation for proper Energy Audit and accounting) for the Project Area may be funded under R-APDRP. However, it shall be outside the scope of SRS/IT Implementing Agency.

4 Declaration Point 6:-

_____ (Utility Name) will ensure ring-fencing of the proposed Project Area (Town) through metering of all import/export metering points and segregation of agriculture feeders within 16 weeks of the sanction of DPR.

5 Declaration Point 10:-

Following items have been excluded from the scope of the DPR. Utility shall arrange the same from their own resources -

- Land, Data Centre & Customer Care Centre & various server rooms and other Civil & Structural Works including earthing.

6 Bill of Quantities (Section 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9 & 5.10)

Phasing of quantity does not require to be stated for the individual items at this stage therefore it has been removed from the formats. However, Utility has to provide break up of the project cost as quarter wise expenditure in the summary section (Section 5.1, Summary of Project Cost)

7 Bill of Quantities (Section 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9 & 5.10)

Certain items have been removed from the BoQs of Data Center, Customer Care Center, Sub-division Office and Other Offices. These items are not required in establishing these offices.

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Part I: Guidelines for Part-A

- 1 Utility should implement the IT infrastructure exactly in line with what is specified in the Model SRS document released by MoP/PFC for completion of Part A work. In case the Utility has already implemented a part of the requirements mentioned in the SRS document then the DPR scope shall cover remaining part(s) and integration of the legacy system with the one that is proposed. In other words, Utility shall have complete system in place mentioned in the SRS document after completion of this project.
- 2 Utility has to create an IT Cell comprising of team of IT experts having relevant qualifications, experience and background in the field of system integration and IT implementation. This team shall be involved from concept to commissioning of the system and shall also be the Nodal Department/Group from the Utility for all issues related to implementation of the project. In addition, the team should be capable of delivering following responsibilities
 - (a) Ensure availability of complete data, which shall require to be migrated to the proposed IT System, to ITIA in soft and hard copies.
 - (b) Cross-verify and authenticate the data migrated by ITIA.
- 3 Utility will have to submit completion certificates for the works executed under 10th Plan APDRP Scheme or short close the projects, which are under implementation. In other words, all the works in progress (under Xth Plan APDRP) need to be completed or short closed before implementing R-APDRP Scheme in the same town.
- 4 In the States, where multiple distribution utilities exist, the State Government should explore the possibility of engaging a single IT consultant to optimize the implementation cost, maintain uniformity of approach and interoperability among all the distribution utilities of the State.
- 5 Utilities may appoint an IT Consultant from the empanelled list or can themselves undertake the responsibility of IT Consultant, if they have the requisite in-house expertise for studying the Model SRS document, utility's business processes and preparation of project DPRs for Part-A work of R-APDRP. Hiring of IT consultants is not mandatory. However, PFC shall reimburse the cost of IT consultant only if it has been appointed through bidding from the empanelled ITCs declared by PFC.
- 6 The IT Consultant will have to certify and sign the DPRs prepared by them stating that the DPR is in line with the approved model SRS document and is aligned completely with the Utility's business processes. Utility should countersign accepting the recommendations before the same is forwarded to PFC.
- 7 Utility on its own or with the help of IT Consultant should map their business processes and make them suitable for IT implementation. Utility/IT Consultant shall study the existing IT system/modules that are working/available/installed in the organisation and assess their suitability with respect to specifications of IT functions of model SRS document.
- 8 Utility should undertake necessary administrative initiatives in terms of delegation of powers and organizational restructuring for proper implementation of the programme and to make the business processes IT worthy.
- 9 Utility should prepare a comprehensive plan for R-APDRP implementation. All the towns where R-APDRP scheme (both Part-A and Part-B) shall be implemented should be clearly listed and DPR for each project area under Part-A shall be prepared and forwarded to PFC for their consideration. Any standalone/ piecemeal scheme for any Project Area for subsequent integration is liable to be rejected.

- 10 The proposed works in DPR should cover total power distribution network and the assets of the Project Area. Utilities should install all components of model SRS document at the same time in a particular Project Area, i.e., integrated installation of Baseline Data Acquisition Systems, Energy accounting & audit systems, GIS based consumer indexing & asset mapping, GIS based integrated network analysis, Connection/ Disconnection system, Customer Care Centre and MIS.
- 11 Utility will provide basic infrastructure viz. building, precision air-conditioning, fire fighting system, access control, main & standby power supply etc. to ITIA for housing IT infrastructure proposed to be created under Part-A of R-APDRP Scheme at its own cost i.e. the same shall not be included in the DPR. It has to be ready for handing over to ITIA as per the requirement.
- 12 Utility has to ensure timely availability of any other infrastructure or facilities that are essential for implementation of Part-A works but are not in the scope of IT Implementing Agency's (ITIA) viz. ring-fencing, system metering etc.
- 13 Works in progress should not be included in the new schemes under R-APDRP.
- 14 Utility may propose replacement of existing modules, within SRS scope, on techno-economic consideration with proper justification and certification that these modules cannot be integrated with proposed system and need replacement due to risk of obsolescence and inadequacy.
- 15 Utility has to consider its future requirements and plans while preparing DPR for the project areas and common systems of the utility.
- 16 Utility has to provide detailed information regarding protocols, type, make, memory map etc. of system meters, which will be needed to integrate energy accounting/ auditing solutions, to the System Integrator within four weeks of award of Contract.
- 17 There shall be one Data Center in a Utility. In case Utility proposes to setup more than one Data Center it has to justify its case.
- 18 Utility has to assign a single customer care telephone number and mobile number for customer interaction.
- 19 DPR of the Project Area (Town) having Data Centre and other utility wide centralised facilities shall be submitted initially to the PFC for approval. Though DPRs of other Project Areas (Town) shall be linked to these centralised facilities/centres, there shall be separate DPR for each Project Area (Town).
- 20 Utility shall submit DPRs of all Project Areas (Towns) preferably together to Nodal Agency (PFC) for approval of Steering Committee.
- 21 Utility may submit DPR proposals of towns as per Guidelines issued by Nodal Agency/ MoP
- 22 DPR shall be annexed with digital single line diagrams (SLD)/Nodal drawings of distribution network of the Project Area. DPRs without Nodal drawings and SLD would not be considered for sanction.
- 23 The cost estimates should not include any departmental overhead expenses. All such expenditures should be borne by the utility.
- 24 Utility will ensure ring-fencing of the proposed Project Area (Town) through metering of all import/export metering points and segregation of agriculture feeders within 16 weeks of the sanction of DPR.
- 25 In case utility has already created IT based consumers database, billing and collection database, and other facilities, it should be ensured that the existing setup is ready for migration and the related application software are open to handshaking with the new upcoming system.
- 26 Cost of DPR preparation can be part of scheme cost, only if prepared by Empanelled IT consultant.
- 27 The deviation from SRS is liable to reject the DPR. However, necessary changes, if any, with justification should be provided in case the Utility intends to amend any clause of the biddable SRS document. While proposing the change, the same should be provided on an exception basis in three columns, viz. the first column should contain the original clause with clause reference, next column should clearly state the amended clause, and the last column should provide the justification and reasons for proposed changes.

- 28 All technical deviations of successful bidders shall be submitted to PFC and its authorized representative.
- 29 Utility shall provide all possible support to MoP/ Nodal Agency (PFC) and their representatives for successful implementation of the projects.
- 30 Utility along with ITC should plan for setting standards like co-ordinate systems for GIS, GIS Data format, put in place transition mechanism so that ITIA shall capture all new customers, change in classification, disconnection, connection, procedures to capture all data etc. up to the completion of the project and shall formulate a system/process so that future addition/up gradation of data base can be made on regular basis.
- 31 During the transit period, Utility along with ITIA has to ensure seamless migration of all information from legacy system to new system without any loss of the same.
- 32 SRS is a generic document. There is no specific server platform or operating system specified in this document. The Utility while customizing RFP document may specify the required platform considering the following -
- a. **Policy** of the State Government or (Utility Name) for selection of the server platform
 - b. **Reliability, availability and serviceability** features as servers are meant to run for critical applications with 99.99% availability.
 - c. **Scalability and expandability** features as servers in the data center are for managing enterprise wide solution for ultimate capacity of utility i.e. entire network, assets, consumer base (including rural, SCADA, other enterprise wide automation, support solutions and the selected server platform.
- 33 After successful commissioning of IT enabled modules in a project, the utility shall embed these integrated modules in its regular business process operation and simultaneously discontinue the prevailing manual/ standalone process operations without any delay.
- 34 Utility should prefer installation of one DT in lieu of a cluster of DTs at the same location to minimize the hardware requirement from operation and maintenance point of view.
- 35 The location of data centre and other centralised facilities shall preferably be selected using the following criteria -
- Easy availability of land at economical cost
 - Easy approach and access for utility's administrative and O&M setup
 - Availability of good infrastructure and telecommunication system
- 36 Scope variation on account of increase of consumer base during the currency of contract or any other reason would be to Utility's account. Incremental quantities to be borne by the utility and any incremental quantity between date of sanction and award should be informed to PFC with justification.
- 37 Cost of boundary meters, installation and commissioning for ring fencing and system metering including 11/22/33 KV Feeders emanating from 220/132/110 KV Sub stations (if required for bringing them under AMR Implementation for proper Energy Audit and accounting) for the Project Area may be funded under R-APDRP. However, it shall be outside the scope of SRS/IT Implementing Agency.
- 38 If SCADA/DMS exists in the Project Area, Utility shall ensure availability of necessary interface/implementation profile for integration of SCADA/DMS with new system. Also, Utility shall define the extent of integration required at the time of NIT. Utility shall ensure that all necessary protocols and other details are provided to ITIA as per requirement.
- 39 Utility shall collect all necessary protocols as well as points of integration in new system from ITIA which may be passed on to SCADA /DMS implementation agency in future for integrating the same with the proposed system.

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Declaration

This is to certify that:

- 1 The proposed DPR includes only new works and excludes other works under implementation.
- 2 The cost estimates do not include any departmental overhead expenses.
- 3 Scheme Completion/ Short closure certificates for works covered under the 10th Plan APDRP Scheme in the proposed Project Area (Town) have been submitted to Field ACC/MoP and no work under the 10th Plan APDRP Scheme is under execution.
- 4a Detailed information regarding protocols, type, make, memory map etc. of system meters, which will be needed to integrate energy accounting/ auditing solutions, shall be made available to the System Integrator within four weeks of award of Contract.
- 4b If SCADA/DMS exists in the Project Area, Utility shall ensure availability of necessary interface points for integration of SCADA/DMS with new system. Also, Utility shall define the extent of integration required at the time of NIT.
- 5 _____ (Utility Name) will henceforth, procure all meters as per guidelines/regulations issued by MoP/CEA.
- 6 _____ (Utility Name) will ensure ring-fencing of the proposed Project Area (Town) through metering of all import/export metering points and segregation of agriculture feeders within 16 weeks of the sanction of DPR.
- 7 The Server platform or operating system proposed in the DPR is based on the following -
 - a Policy of the State Government or (Utility Name) for selection of the server platform
 - b Reliability, availability and serviceability features as servers are meant to run for critical applications with 99.99% availability.
 - c Scalability and expandability features as servers in the data center are for managing enterprise wide solution for ultimate capacity of utility i.e. entire network, assets, consumer base (including rural, SCADA, other enterprise wide automation, support solutions and the selected server platform.
- 8 Utility shall provide basic infrastructure viz. building, precision air-conditioning, fire fighting system, access control, main & standby power supply etc. to ITIA for housing IT infrastructure proposed to be created under Part-A of R-APDRP Scheme at its own cost. It shall be ready for handing over to ITIA as per the requirement.
- 9 DPR has been prepared in line with SRS and as per the guidelines of R-APDRP issued by Ministry of Power / PFC and is aligned completely with the Utility's business processes.
- 10 Following items have been excluded from the scope of the DPR. Utility shall arrange the same from their own resources -
 - Land, Data Centre & Customer Care Centre & various server rooms and other Civil & Structural Works including earthing.
 - Infrastructures such as Air conditioning system,
 - External & Internal electrification & Lighting,
 - Fire fighting system
 - Any mobile equipment such as Crane, truck, Jeep, filter M/c, etc.
 - Any T&P, testing equipments. etc.
 - Office furniture, Computer and software for use in office except for the computers required for business process software.
 - Any contract for IT/ Outsourcing of services of revenue expenditure type where there is no capital addition.
 - Communication equipments such as mobile phone, telephone etc other than those specified in SRS
 - Manpower for managing collection centres, data centre & customer care centres

11 IT Cell/Group has been formed at utility level, which shall be involved from concept to commissioning of the system and co-ordinate from the Utility side for all issues related to implementation of the project. The detail of the authorised signatory & Nodal officer are given below -

Authorised Signatory:

Signature:

Name:

Tel. No. / Mobile No. :

Designation:

Email address :

IT Consultant

Signature-----

Name-----

Designation_____

Approved by:

Signature:

Name:

(Utility Nodal Officer of IT for Part-A)

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Detail Project Report - Town with Data Centre Executive Summary

State Profile

Name of the State	#Name	Madhya Pradesh
Number of Distribution Companies	No.	0

Brief Utility Profile

Name of the Utility	#Name	XVZ Distribution Utility
Area of Coverage	Sq. kM	0
Total Number of consumers	Numbers	0
Peak Demand of the Last Fiscal	MW	0
Average Demand of the Last Fiscal	MW	0
Total Annual Sales	MU	0
Location of Data Center	#Name	0
Project Area under which Data Center is planned	#Name	PQR Town
Appointed IT Consultant under R-APDRP	Yes/No	0
Name of the IT Consultant (If appointed)	#Name	ABC Consulting Firm
Previous Financial Year		
AT&C Losses	%	0
Collection Efficiency	%	0

Project Area Profile

Name of the Project Area	#Name	PQR Town
Place, Town	#Name	0
District, State	#Name	0
Total Area of Coverage	Sq. kM	0
Total Population (as per 2001 census)	No.	0
Total Number of Offices including HQ, Regional, Circle, Division, Sub-division, Call Centers, Billing Centers, Stores, RAO etc.	No.	0
Number of Metered Consumers	No.	0
Number of Unmetered Consumers	No.	0
Annual Energy Input of Previous FY	MUs	0
Annual Metered Energy Sales of Previous FY	MUs	0
Annual Assessed Energy in Previous FY	MUs	0
Total Connected Load	MW	0
Billing	Rs. Cr.	0
Revenue Collection	Rs. Cr.	0
Time Required to ring-fence the Project Area & Meter all the Energy Import/Export Points	Days	0
Collection Efficiency	%	0
AT&C Loss in the System	%	0

Status

		Applications Proposed under this DPR
		Fully Covered/Partly Covered/Not Covered
PART A - Essentially Required for IT Backbone		
Module 1: Meter Data Acquisition		
Module 2: Energy Audit		
Module 3: New Connection		
Module 4: Disconnection & Dismantling		
Module 5: GIS based Consumer Indexing & Asset Mapping		
Module 6: GIS based Integrated Network Analysis Module		
Module 7: Centralized Customer Care Services		
Module 8: Management Information System		
Module 9: Web Self Services		
Module 10: Identify & Access Management System		
Module 11: System Security Requirement		
PART B - Requirement based implementation of Commercial Processes		
Module 12: Development of Commercial Database of Consumers		
Module 13: Metering		
Module 14: Billing		
Module 15: Collections		
PART C - Other Optional Application Packages		
Module 16: Asset Management		
Module 17: Maintenance Management		

Project Funding

Cost Item		PFC	Own Funds	Other Funding Agency	Total
Total Setup Cost	Rs. Lac	0.00			0.00
FMS Charges*	Rs. Lac	0.00	0.00		0.00
Cost not covered in the scope of work under R-APDRP	Rs. Lac			0.00	0.00
Total		0.00	0.00	0.00	0.00

Cost Benefit Analysis

ERR	%	#DIV/0!
Payback Period	Years	0

Phasing of Expenditure

Particular	Expenditure Phasing						
	Project Cost Rs. Lac	Q1 Rs. Lac	Q2 Rs. Lac	Q3 Rs. Lac	Q4 Rs. Lac	Q5 Rs. Lac	Q6 Rs. Lac
IT Consultant deployment Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ring-Fencing Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Project Management Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Data Center							
Hardware	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bandwidth Charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Implementation Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer Care Center							
Hardware	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Implementation Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-division Office							
Hardware	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bandwidth Charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Implementation Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Offices							
Hardware	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Implementation Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GIS Survey Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00
System Metering Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Costs not covered in SRS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Volume I: Introduction

1.1 Background

The Ministry of Power, Government of India initiated Power Sector reforms in the 1990s to invite private investments for setting up additional generating capacity to bridge the wide gap between demand and supply. Numerous investors, both Indian and foreign, came forward to set up new generating capacity but little progress could be achieved due to serious inefficiencies and losses in the electricity distribution business in almost all states of the country.

Government of India (GOI) initiated reforms in the distribution sector in 2000. Distribution sector provides the last mile connectivity for power supply and deals with large number of consumers. As a part of distribution reforms, GOI launched APDP (Accelerated Power Development Program) in 2001 which was later rechristened as APDRP (Accelerated Power Development and Reforms Program) during the 10th Five Year Plan.

To continue the support to distribution reforms during the 11th Five Year Plan, GOI has reintroduced R-APDRP (Restructured APDRP) with revised terms and conditions. The R-APDRP primarily aims at reducing Aggregate Technical and Commercial (AT&C) losses in urban areas. It is a necessary condition of the scheme that the utilities would need to demonstrate performance improvement for availing financial benefits provided under the scheme. This would require collection of accurate data and measurement of loss reduction performance. Data integrity and performance measurement pose many challenges for the state power utilities. This problem can be surmounted only by: (i) setting up reliable and “no manual touch” systems for data collection; and (ii) adoption of Information Technology in the areas of energy accounting.

IT based systems and solutions that measure the loss levels reliably will be essential before regular distribution strengthening projects are implemented under the next phase of R-APDRP. Once the benefits of the investments can be measured, the investments would justify themselves.

Projects under the R-APDRP program shall be taken up in Two Parts. Part-A shall include the projects for establishment of baseline data and IT applications for energy accounting/ auditing & IT based consumer service centres. Part-B shall include regular distribution strengthening projects.

The R-APDRP program will cover urban areas – towns and cities with population of more than 30,000 (10,000 incase of special category states).

MOP, GOI has appointed Power Finance Corporation as the Nodal Agency for implementing this program.

1.2 Objective of the Project

[Narrate paragraph about objective of the project being proposed in this DPR including broad scope and coverage of the area etc.]

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 Volume II: State-Utility Profile

2.1 State Profile

2.1.1 Power Sector Structure

State	#Name	Madhya Pradesh
Whether State Electricity Board unbundled	Yes/No	
If yes, Number of Distribution Companies	No.	

If yes, provide following information:

Companies in the State Power Sector	Name of the Company	CMD of the Company & Contact Details	Head Quarter	Primary Purpose of the Company
Generation Company				
Transmission Company				
Trading Company				
Distribution Company 1				
Distribution Company 2				
Distribution Company 3				
Distribution Company 4				
.....				

2.1.2 Map of the State Indicating Geographical Spread of Each Distribution Utility

Please attach the image file of the map of the State indicating each distribution utilities with latitude & longitude of extreme point.
 Click on:- Insert--Object--Create from file--Browse (Click on "Display Icon")--Ok



2.2 Utility Profile

2.2.1 Basic Information

Particular	#Name	Value
Name of Utility	#Name	XVZ Distribution Utility
Date of Incorporation	#Date	
Contact Details	Address	
	Phone Office 1	
	Phone Office 2	
	Fax	
	email	
Point of Contact	Name of the person	
	Designation	
	Phone No.	
	Mobile	
	email	
Other Information		
Area of Coverage	Sq. km	
Total Number of consumers	Numbers	
Commercial Information of Last Fiscal		
Peak Demand	MW	
Average Demand	MW	
Annual Energy Input in the Utility	MU	
Annual Metered Energy Sales	MU	
Annual Assessed Energy	MU	
Total Annual Sales	MU	
Data Center Information		
Location of the Data Center in the Utility	#Name	
Does this DPR covers Data Center?*	Yes/No	Yes
If no, name of the Project Area under which Data Center of the Utility is planned	#Name	
Whether Utility has already submitted DPR for the Project Area where data center is located?	Yes/No	
IT Consultant Information		
Appointed an IT Consultant?	Yes/No	
If yes, provide following information		
IT Consultant	Name	ABC Consulting Firm
	Address	
	Phone No.	
	email	

Operational Structure of Utility

Name of the Region/Zone (Level 2 Office)	Number of Circles (Level 3 Office)
Region 1	
Region 2	
Region 3	

Region 4		
Region 5		
.....		

2.2.2 Consumer Information

Utility Consumer Information (Last Financial Year)	Number of Metered Consumers	Estimated Number of Unmetered Consumers	Metered Sales	Assessed Energy Sales	Total Sales	Connected Load	Billing	Collection
	No.	No.	MUs	MUs	MUs	kW	Rs. Cr.	Rs. Cr.
LT Domestic								
LT Commercial								
LT Industry								
LT Agriculture								
LT Others								
HT Railways								
HT Industrial								
HT Commercial								
HT Others								
Total								

2.2.3 Asset Information

Assets (Last Financial Year)	Utility
Total Number of EHV Sub-stations feeding the Project Area	Numbers
Total Number of Power Transformers	Numbers
Total Capacity of Power Transformers	MVA
Total Number 66/33 kV Feeders	Numbers
Total Length of 66/33 kV Feeders (Overhead)	kM
Total Length of 66/33 kV Feeders (Under-ground)	kM
Total Number of 66/11 kV and 33/11 kV Sub-stations feeding the Project Area	Numbers
Total Number of Power Transformers	Numbers
Total Capacity of Power Transformers	MVA
Total Number 11 kV Feeders	Numbers
Number of Metered 11 kV Feeders	Numbers
Total Length of 11 kV Feeders (Overhead)	kM
Total Length of 11 kV Feeders (Under-ground)	kM
Total Length of LT Lines (Overhead)	kM
Total Length of LT Lines (Under-ground)	kM
Total Number of Distribution Transformers	Numbers
Number of Metered Distribution Transformers	Numbers
Total Capacity of Distribution Transformers	MVA

2.2.4 Financial/ Commercial Information				
Particulars		Previous FY	Previous FY-1	Previous FY-2
Losses/ Efficiencies				
AT&C Losses	%			
Collection Efficiency	%			
Billing	Rs. Cr.			
Revenue Collection	Rs. Cr.			
Ratios				
Debt Equity Ratio				
Current Ratio				
DSCR				

2.2.5 Status						
Utility shall update the diagram given in Annexure E on the basis of table below						
Applications	Is replacement of current application being proposed in DPR?	Is the application currently being used in the project area?	Can it be integrated with new IT infrastructure?	Applications Proposed under this DPR		Reason for full, part or no replacement
	Not applicable/ Full replacement/ Part replacement/ No replacement	Yes/No	Yes/No	Fully Covered/Partly Covered/Not Covered		
PART A - Essentially Required for IT Backbone						
Module 1: Meter Data Acquisition						
Module 2: Energy Audit						
Module 3: New Connection						
Module 4: Disconnection & Dismantling						
Module 5: GIS based Consumer Indexing & Asset Mapping						
Module 6: GIS based Integrated Network Analysis Module						
Module 7: Centralized Customer Care Services						
Module 8: Management Information System						
Module 9: Web Self Services						
Module 10: Identify & Access Management System						
Module 11: System Security Requirement						
PART B - Requirement based implementation of Commercial Processes						
Module 12: Development of Commercial Database of Consumers						
Module 13: Metering						
Module 14: Billing						
Module 15: Collections						
PART C - Other Optional Application Packages						
Module 16: Asset Management						
Module 17: Maintenance Management						

Name of the application/ business process that requires data migration into the proposed applications	Type	If Integrated, what are the other applications integrated with this?	Database (Access, SQL etc.)	Data Format (Access Table, Paper forms, Excel Sheets etc.)	Quantity per period(e.g. number of bills generated per month etc.)	Volume of Data (1000 records, 5000 pages etc)	Data mirroring/ replication needed?	Comments
	Stand alone application/ Integrated application/ Manual Business Process							
Application/Business Process 1								
Application/Business Process 2								
Application/Business Process 3								
Application/Business Process 4								
Application/Business Process 5								
Application/Business Process 6								
Application/Business Process 7								
Application/Business Process 8								
.....								

2.2.6 Organisation Setup

Please attach the image file of the indicative diagram indicating organisational setup of the Utility
 Click on:- Insert--Object--Create from file--Browse (Click on "Display Icon")--Ok

2.2.7 List of the Towns in Distribution Utility

List of the Towns selected by [name of the Utility] for implementation of Part A of R-APDRP is mentioned below

List of all Project Areas (Towns) planned to be covered under R-APDRP	Population as per 2001 census	Status of APDRP Xth Plan	Status of R-APDRP XIth Plan	Location of Data Center #
Town 1			Yet to Submit DPR	
Town 2			Yet to Submit DPR	
Town 3			Yet to Submit DPR	
Town 4			Yet to Submit DPR	
Town 5			Yet to Submit DPR	
Town 6			Yet to Submit DPR	
Town 7			Yet to Submit DPR	
Town 8			Yet to Submit DPR	
Town 9			Yet to Submit DPR	
Town 10			Yet to Submit DPR	
Town 11			Yet to Submit DPR	
Town 12			Yet to Submit DPR	
.....			Yet to Submit DPR	
# Tick against the Town Name where data center is located				



POWER FINANCE CORPORATION LTD.
 Detail Project Report - Town with Data Centre
 Volume III: As-Is of Utility

3.1 As-Is of the Utility

3.1.1 Consumer Indexing & Asset Mapping Information

Consumer Indexing		% of Indexing completed	Number of Consumers Covered	Date of survey completed	Specify File, Formats of the Output (e.g. XML, CSV etc.)
HT					
GIS Based	%				
Non-GIS Based	%				
LT					
GIS Based	%				
Non-GIS Based	%				

Asset Mapping		% of Asset mapping completed	Number of Assets Covered	Date of survey completed	Specify File, Formats of the Output (e.g. XML, CSV etc.)	Specify assets covered (e.g. poles, lines, switches etc.)
66 kV System						
GIS Based	%					
Non-GIS Based	%					
33 kV System						
GIS Based	%					
Non-GIS Based	%					
11 kV System						
GIS Based	%					
Non-GIS Based	%					
LT System						
GIS Based	%					
Non-GIS Based	%					

If consumer indexing or asset mapping is done in part or full then.

When was the survey completed?	#Date		
Whether the information is mapped on Satellite Imagery Maps	Yes/No		
If yes, specify			
Format of the file e.g. CSV etc.			
Resolution			
Accuracy			
Date of finalization			
Whether the information can be analysed through a GIS application directly	Yes/No		
Whether the meter reading books / ledgers are also organized on DT / feeder basis	Fully/ Partly/ Not done		
Whether the index database is regularly updated with each new connection/disconnection	Always/ Seldom/ Never		

3.1.2 Customer Care Center

Name & Location of Customer Care Center		Type of CCC	Types of Complaint Addressed
		Manual/Co	
CCC1			
CCC2			
CCC3			
CCC4			
CCC5			
.....			



3.1.3 MBC & Energy Audit Process

Existing MBC Process		Number of Centers	Number of Consumers Covered	Detail
Meter Reading				
Manual				
MRI				
AMR				
.....				
Billing				
Manual				
Computerized				
Online				
Spot Billing				
....				
Collection				
Cash Collection Center				
Kiosk				
Cheque				
Online Payment				
....				

Existing Energy Accounting and Auditing Process		Manual/A MR Based	Number of Units Covered	Details
DT wise				
11 kV Feeder wise				
33/11 kV SS wise				

3.1.3 Application Information

Application		Version	Product Vendor	Number of Licenses	Number of users per License	Platform	Comments
Detailed Application Information needs to be provided in Annexure D							
Meter Data Acquisition & Analysis Software							
Energy Audit Software							
New Connection & Disconnection Management System							
GIS based Integrated Network Analysis Software							
Management Information System Software							
Identify & Access Management System Software							
Billing Software							
Other Application 1							
Other Application 2							
Other Application 3							
Basic Software License							
Server OS							
Type 1							
Type 2							
Type 3							
Desktop OS							
Type 1							
Type 2							
Type 3							
Anti Virus							
Type 1							
Type 2							
Type 3							
Databases							
Type 1							
Type 2							
Type 3							

3.1.4 Hardware Information

Hardware	Number	Make	Model	Memory (RAM) (Capacity and Type)	Storage (HDD) (Capacity and Type)	Processor (Nos & type)	Type	Year of Purchase	Sharing with other applications or for exclusive use
Servers									
Type 1									
Type 2									
Type 3									
Type 4									
WorkStation PC									
Type 1									
Type 2									
Type 3									
Type 4									
Storage & Backup Devices									
Type 1									
Type 2									
Type 3									
Type 4									
UPS & Battery System									
Type 1									
Type 2									
Type 3									
Type 4									
Printers									
Type 1									
Type 2									
Type 3									
Type 4									
Machines									
KIOSK									
Type 1									
Type 2									
Type 3									
IDMS along with Automatic Token Dispenser Machine									
Type 1									
Type 2									
Type 3									
Cash/ Cheque Collection KIOSK									
Type 1									
Type 2									
Type 3									
Hand Held Spot Billing Equipment connected with Portable Printer									
Type 1									
Type 2									
Type 3									
Any Other device/equipment									
Type 1									
Type 2									
Type 3									
Type 4									

3.1.5 Networking Information

Equipments	Numbers/ Unit	Type/IOS Release	Make	Model	Number of Ports	Type of Port	Year of Purchase
Server Racks							
Type 1							
Type 2							
Type 3							
Type 4							
Switches							
Type 1							
Type 2							
Type 3							
Type 4							
Routers							
Type 1							
Type 2							
Type 3							
Type 4							

Cable/Optical Fiber								
Type 1								
Type 2								
Type 3								
Type 4								
Any Other device/equipment								
Type 1								
Type 2								
Type 3								
Type 4								

3.1.6 Website Information

Particulars	Yes/No	Detail
Does Utility have its own website?	Yes/No	
If yes, mention the URL	#URL	
List down all the major facilities being provided to the consumers/suppliers/employees/other stakeholders through website		
<i>Consumer Related (Illustrative)</i>		
Application form submission for new connection		
Application form submission for disconnection		
Registration of complaint against outages		
Registration of complaint against corruption		
Online bill payment		
Other 1		
Other 2		
Other 3		
Other 4		
Other 5		
....		
<i>Supplier Related (Illustrative)</i>		
Tender Information		
Tendering or Bid submission		
Online payment		
Other 1		
Other 2		
Other 3		
Other 4		
Other 5		
....		
<i>Employees Related (Illustrative)</i>		
Payroll System		
Leave balance		
Expense Claim		
Other 1		
Other 2		
Other 3		
Other 4		
Other 5		
.....		
<i>Other Stakeholder (Illustrative)</i>		
Projects		
AT&C Loss Status		
Other commercial & financial information		
Other 1		
Other 2		
Other 3		
Other 4		
Other 5		
.....		
Security Features		

POWER FINANCE CORPORATION LTD.

Detail Project Report - Town with Data Centre

Volume IV: Project Area Details

4.1 Project Area

With the launch of the Restructured -APDRP initiative of GoI, there lies opportunity before the Indian distribution sector to achieve performance excellence through accountability and automation in distribution system operation. As per the R-APDRP, utility shall prepare IT project proposal under Part-A for achieving objective of the programme and establishing Base line data.

[Name of the Utility] has decided to include the following towns for funding under R-APDRP. The present DPR has been prepared for *[brief objective e.g. establishment of the baseline data system, IT applications for energy accounting/auditing, IT based consumer care services etc. along with common requirements and services for covering the entire APDRP Scheme coverage area]* *[name of town]*. The details of the Project Area are placed below:

4.1.1 Basic Information

Particular	unit	Value	
Name of the Project Area	#Name	PQR Town	
Place, Town	#Name		
District	#Name		
Nearest Railway Station	#Name		
Nearest Functional Airport	#Name		
Total Area of Coverage	Sq. kM		
Total Population (as per 2001 census)	No.		
Point of Contact	Name of the person		
	Designatio		
	Phone No.		
	Mobile		
	email		
Is it the same Town/Project Area in the Utility where Data Center is located?	Yes/No	No	
<i>If yes, provide detail of the Pilot Area identified</i>			
Name of the Pilot Area	#Name		
Adminstrative Setup	Circle/Division etc.		
Number of Offices falling under*		Project Area	Pilot Area
Head Office	No.		
Regional Offices	No.		
Circle Offices	No.		
Division Offices	No.		
Sub-division Offices	No.		
Distribution Centers	No.		
Stores	No.		
Regional Accounting Offices	No.		
Billing Centers	No.		
Customer Care Centers	No.		
Collection Centers	No.		
Total	No.		

* Detailed office information is the part of Annexure B

4.1.2 Consumer Information

Project Area Consumer Information (Last Financial Year)		Number of Metered Consumers	Estimated Number of Unmetered Consumers	Metered Sales	Assessed Energy Sales	Total Sales	Connected Load	Billing	Collection
		No.	No.	MUs	MUs	MUs	kW	Rs. Cr.	Rs. Cr.
LT Domestic									
LT Commercial									
LT Industry									
LT Agriculture									
LT Others									
HT Railways									
HT Industrial									
HT Commercial									
HT Others									
Total									
Pilot Area Consumer Information (Last Financial Year)		Number of Metered Consumers	Estimated Number of Unmetered Consumers	Metered Sales	Assessed Energy Sales	Total Sales	Connected Load	Billing	Collection
		No.	No.	MUs	MUs	MUs	kW	Rs. Cr.	Rs. Cr.
LT Domestic									
LT Commercial									
LT Industry									
LT Agriculture									
LT Others									
HT Railways									
HT Industrial									
HT Commercial									
HT Others									
Total									

4.1.3 Asset Information

Assets**		Project Area	Pilot Area
Total Number of EHV Sub-stations feeding the	Numbers		
Total Number of Power Transformers	Numbers		
Total Capacity of Power Transformers	MVA		
Total Number 66/33 kV Feeders	Numbers		
Total Length of 66/33 kV Feeders (Overhead)	kM		
Total Length of 66/33 kV Feeders (Under-	kM		
Total Number of 66/11 kV and 33/11 kV Sub-	Numbers		
stations feeding the Project Area			
Total Number of Power Transformers	Numbers		
Total Capacity of Power Transformers	MVA		
Total Number 11 kV Feeders	Numbers		
Number of Metered 11 kV Feeders	Numbers		
Total Length of 11 kV Feeders (Overhead)	kM		
Total Length of 11 kV Feeders (Under-ground)	kM		
Total Length of LT Lines (Overhead)	kM		
Total Length of LT Lines (Under-ground)	kM		
Total Number of Distribution Transformers	Numbers		
Total Capacity of Distribution Transformers	MVA		
Total Number of Energy Import Points for the	Numbers		
Number of Metered Energy Import Points for the	Numbers		
Total Number of Energy Export Points for the	Numbers		
Number of Metered Energy Export Points for the	Numbers		
If 100% Energy Import/Export Points are			
Total Annual (T-1) Energy Input	MUs		
Peak Demand	MW		
Average Demand	MW		
If 100% Energy Import/Export Points are not			
Estimated Annual (T-1) Energy Input	MUs		
Estimated Peak Demand	MW		
Estimated Average Demand	MW		
Time Required to ring-fence the Project Area & Meter all the Energy Import/Export Points	Days		

**Detailed asset information is the part of Annexure C

4.1.4 Commercial Information

Particulars		Previous FY	Previous FY-1	Previous FY-2
Peak Demand (Met)	MW			
Peak Demand (Unrestricted)	MW			
Annual Energy Input	MU			
Annual Metered Energy Sales	MU			
Annual Assessed Energy	MU			
Annual Billed Energy	MU			
Revenue Billing	Rs., Crs.			
Revenue Collection	Rs., Crs.			
Metering Efficiency	%			
Billing Efficiency	%			
Collection Efficiency	%			
AT&C Loss in the System	%			

4.2 As-Is of Project Area

4.2.1 Consumer Metering Information

Project Area Consumers	No.	Metered with AMR Meters			Metered with AMR Compatible Meters	Metered with Static Meters	Metered with Electro-magnetic Meters & Others	Unmetered	Total
		GSM/ GPRS/ EDGE	CDMA	LPR/Others					
LT Domestic	No.								
LT Commercial	No.								
LT Industry	No.								
LT Agriculture	No.								
LT Others	No.								
HT Railways	No.								
HT Industrial	No.								
HT Commercial	No.								
HT Others	No.								
Pilot Area Consumers	No.	Metered with AMR Meters			Metered with AMR Compatible Meters	Metered with Static Meters	Metered with Electro-magnetic Meters & Others	Unmetered	Total
		GSM/ GPRS/ EDGE	CDMA	LPR/Others					
LT Domestic	No.								
LT Commercial	No.								
LT Industry	No.								
LT Agriculture	No.								
LT Others	No.								
HT Railways	No.								
HT Industrial	No.								
HT Commercial	No.								
HT Others	No.								

4.2.2 Asset Metering Information

Project Area Assets	No.	Metered with AMR Meters			Metered with AMR Compatible Meters	Metered with Static Meters	Metered with Electro-magnetic Meters & Others	Unmetered	Total
		GSM/ GPRS/ EDGE	CDMA	LPR/Others					
Import Points above 33kV level	No.								

Export Points above 33kV level	No.								
33 kV Feeder at 33/11 kV SS	No.								
Import Points at 33kV feeders other than 33/11 kV SS	No.								
Export Points at 33kV feeders	No.								
11 kV feeders at 33/11 kV SS	No.								
Import Points at 11kV feeders	No.								
Export Points at 11kV feeders	No.								
Distribution Transformers	No.								
Import Points at LT feeders	No.								
Export Points at LT feeders	No.								

Pilot Area Assets		Metered with AMR Meters			Metered with AMR Compatible Meters	Metered with Static Meters	Metered with Electro-magnetic Meters & Others	Unmetered	Total
		GSM/ GPRS/ EDGE	CDMA	LPR/Others					
Import Points above 33kV level	No.								
Export Points above 33kV level	No.								
33 kV Feeder at 33/11 kV SS	No.								
Import Points at 33kV feeders other than 33/11 kV SS	No.								
Export Points at 33kV feeders	No.								
11 kV feeders at 33/11 kV SS	No.								
Import Points at 11kV feeders	No.								
Export Points at 11kV feeders	No.								
Distribution Transformers	No.								
Import Points at LT feeders	No.								
Export Points at LT feeders	No.								

4.2.3 Consumer Indexing & Asset Mapping Information

Consumer Indexing		% of Indexing completed	Number of Consumers Covered	Date of survey completed	Specify File, Formats of the Output (e.g. XML, CSV etc.)
HT					
GIS Based	%				
Non-GIS Based	%				
LT					
GIS Based	%				
Non-GIS Based	%				

Asset Mapping		% of Asset mapping completed	Number of Assets Covered	Date of survey completed	Specify File, Formats of the Output (e.g. XML, CSV etc.)	Specify assets covered (e.g. poles, lines, switches etc.)



66 kV System						
GIS Based	%					
Non-GIS Based	%					
33 kV System						
GIS Based	%					
Non-GIS Based	%					
11 kV System						
GIS Based	%					
Non-GIS Based	%					
LT System						
GIS Based	%					
Non-GIS Based	%					

If consumer indexing or asset mapping is done in part or full then,

When was the survey completed?	#Date	
Whether the information is mapped on Satellite Imagery Maps	Yes/No	
If yes, specify		
Format of the file e.g. CSV etc.		
Resolution		
Accuracy		
Date of finalization		
Type of Imagery such as IKONOS/QUICKBIRD/CRTOSAT etc.)		
Whether the information can be analysed through a GIS application directly	Yes/No	
Whether the meter reading books / ledgers are also organized on DT / feeder basis		Fully/ Partly/ Not done
Whether the index database is regularly updated with each new connection/disconnection		Always/ Seldom/ Never

4.2.4 Customer Care Center

Name & Location of Customer Care Center		Type of CCC	Types of Complaint Addressed
		Manual/Com	
CCC1			
CCC2			
CCC3			
CCC4			
CCC5			
.....			



4.3 Scope of Work

Write-up on functional level requirement, hardware & software application and configuration diagram of data centre

4.3.1 Data Center and Control Facilities

4.3.1.1 Database Server with Application

[Brief Writeup]

Other Servers

[Brief Writeup]

4.3.1.2. Storage & Backup Solution

[Brief Writeup]

4.3.1.3 Consumables

[Brief Writeup]

4.3.1.4 Desktop, Printers Etc.

[Brief write up including at Customer Care Centre and other offices of Utility Town]

4.3.1.5 Power Supply System

[Brief write up including at Customer Care Centre and other offices of Utility Town]

4.3.1.6 Active Items at Data Center

[Brief write up]

4.3.1.7 Passive Items at Data Center

[Brief write up]

4.3.1.8 Application Software

4.3.1.9 Customer Care Center

[Brief write up]

4.3.1.10 AMR Based Data Logging System for Town

[Brief write up]

4.3.1.11 Misc. Items for Town

[Brief write up]

4.3.1.12 GIS Implementation for Town



[Brief write up]

Field Survey, Consumer Indexing & Asset Coding work covering each customer and each asset based on electrical system codification and the source of supply to particular customer as per the specification.

Supply of latest satellites imagery maps and preparation of physical Area Maps based on available information/information to be collected, overlaying of features on the map with appropriate scale for viewing graphically with the aid of suitable software as per Technical Specification.

4.3.1.13 Data Migration

[Brief write up]

Giving detail on business processes of the utility which are manual and records are kept in forms, ledgers, registers etc. During project implementation, all data related to the processes shall be migrated in required format. Moreover, data for the applications which are planned to be phased out shall also be migrated into new system. The quantum of data is indicated at Vol.IIb in the DPR.

4.3.1.14 Existing Applications to be sunset

[Brief write up]

Justification for the applications to be sunset.

4.3.1.15 Application Integration

[Brief write up]

Existing applications to be integrated with the new system developed under R-APDRP

Protocols of existing AMR based system/consumer meters

[Brief write up]

4.3.2 Scope of Facility Management Services covered under R-APDRP

[Brief write up]

[Facility management Services within 3 years of approval of Project DPR but after successful testing and implementation of Project can be covered under R-APDRP. Beyond this period the utility shall bear the cost being revenue type expenditure.]

4.3.3. Scope of work/ Services provided by Utility

4.3.3.1 Civil, Electrical, Mics. Work

[Brief write-up]

[All civil & architectural works, internal and external electrification, special electronic earthing for Server system, precision air conditioning and ventilation, fire fighting system and Access control system required for Data center, Customer care centers, Sub Station buildings and various utility premises are to be provided by Utility as per requirement. These are not covered under R-APDRP. Office furniture, Computer and software for use in Utility office except for the computers required for business process automation are excluded from the scope of the project.]

4.3.3.2 Network Connectivity

[Brief write-up]

[Enter into an agreement with bandwidth providers]

4.3.3.3 Ring Fencing of the Town

[Brief write up]

[Utility shall procure and install the System Meters (Import/ Export meters, Feeder Meters, DT Meters, Boundary meters etc.) separately and under take feeder segregation, if required, with in 16 weeks of LoA.

[System metering requirements for feeders emanating from 220/132/110/66 KV Sub stations may also be included, if required for bringing them under AMR Implementation for proper Energy Audit and accounting at the cost of Utility.]

4.3.3.4 Facility Management Services

[Brief write up]

[Facility management Services beyond 3 years of approval of Project DPR and at least for 5 years shall be arranged by the utility at its own cost as the same being revenue type expenditure.]

POWER FINANCE CORPORATION LTD.

Detail Project Report - Town with Data Centre

Volume V: Project Cost Estimate

5.1 Summary of Project Cost

Particular		Project Cost Rs. Lac	Expenditure Phasing					
			Q1 Rs. Lac	Q2 Rs. Lac	Q3 Rs. Lac	Q4 Rs. Lac	Q5 Rs. Lac	Q6 Rs. Lac
IT Consultant deployment Cost		-						
Ring-Fencing Cost		-						
Project Management Cost		-						
Data Center								
Hardware		-						
Software		-						
Bandwidth Charges		-						
Implementation Cost		-						
Sub Total		-	-	-	-	-	-	-
Customer Care Center								
Hardware		-						
Software		-						
Implementation Cost		-						
Sub Total		-	-	-	-	-	-	-
Sub-division Office								
Hardware		-						
Software		-						
Bandwidth Charges		-						
Implementation Cost		-						
Sub Total		-	-	-	-	-	-	-
Other Offices								
Hardware		-						
Implementation Cost		-						
Sub Total		-	-	-	-	-	-	-
GIS Survey Cost		-						
System Metering Cost		-						
Costs not covered in SRS		-						
Total Cost		-	-	-	-	-	-	-
Cost not covered in the scope of work under R-APDRP	Rs. Lac	-	-	-	-	-	-	-
Civil, Electrical, Misc Work	Rs. Lac							
Network Connectivity	Rs. Lac							
Other System/ Services (ERP etc.)	Rs. Lac							
Costs not covered in SRS	Rs. Lac							
Any contract for Outsourcing of IT related activities being taken up (AMC etc.)	Rs. Lac							
Grand Total	Rs. Lac	-	-	-	-	-	-	-
	FMS Charges		Year 1	Year 2	Year 3	Year 4	Year 5	Total
FMS Charges*	Rs. Lac							-

*PFC shall fund FMS Charges, under R-APDRP scheme, only for the remaining duration of the scheme after successful completion of the project. Since FMS charges are revenue expenditure, the same shall be borne by Utility beyond R-APDRP scheme.

5.2 Ring-fencing Cost

		Unit	Quantity	FOB (per unit)	Freight & Insurance (per unit)	Taxes & Duties* (per unit)	Total
Equipment	Type		No.	Rs.	Rs.	Rs.	Rs.
Boundary Meters**							
Boundary Meters at import/export points within project area:							
Total Cost							-

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

**Break up of total Boundary Meter quantity shall be given for the purpose of ring fencing. Cost of boundary meters for the project area including installation & commissioning cost of the same may be funded under R-APDRP. However, It shall be outside the scope of IT Implementing Agency.

5.3 Project Management Cost

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

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

Specific Exclusions

- 1 All civil & architectural works
- 2 Internal & external electrifications
- 3 Special electronic earthing for server system
- 4 Precision air conditioning & ventilation
- 5 Fire fighting system & access control system required for any office

- 6 Manpower required for managing collection centers and customer care centers
- 7 Collection of cash from customers
- 8 Supply of meters at sub-station and DT location

- 9 The vendor is not expected to address following
 - Prove & execute a disaster recovery plan
 - Plan for business continuity
 - Reframe or establish IT processes within Utility
 - Train on subject other than that relevant for Utility's system implementation
 - Address IT organization and governance related issues

5.4 Data Center Cost (BoQ)

Equipment	Type (Refer SRS Document)	Quantity Unit	FOB (per unit) Rs.	Freight & Insurance (per unit) Rs.	Taxes & Duties* (per unit) Rs.	Total (per unit) Rs.	Total Rs.
Hardware/ Equipment							
Server Hardware							
Database Server for GIS in cluster fail-over Mode		No.				-	-
Database Server for other applications in cluster fail-over Mode		No.				-	-
GIS Application Server		No.				-	-
Application Server for others		No.				-	-
Testing, Development & QA Server		No.				-	-
Access Control Server		No.				-	-
Anti-Virus Server		No.				-	-
DNS Server		No.				-	-
LDAP Server		No.				-	-
Web Server		No.				-	-
Reverse Proxy Server		No.				-	-
EMS/NMS Server with Network Operation Console		No.				-	-
Mail/ Messaging Server		No.				-	-
Sub Total						-	-
Workstation PC (Computer chair, table etc.)		No.				-	-
Sub Total						-	-
Storage & Backup Devices							
SAN storage		No.				-	-
Fiber Channel SAN switch		No.				-	-
SAN Cabling		Set				-	-
Backup Server		No.				-	-
Tape Library		No.				-	-
Other Storage Device		No.				-	-
Sub Total						-	-
Server Racks							
IDF/MDF Wall Mount Racks						-	-
IDF/MDF Floor Mount Racks						-	-
Sub Total						-	-
Switches							
Core Switch						-	-
Access Switch						-	-
Distribution Switch						-	-
Layer II Switch						-	-
Sub Total						-	-
Routers							
Router for MPLS/ VPN Network						-	-
Router for Internet Gateway						-	-
Sub Total						-	-
Other Active Devices							
Application Load Balancer						-	-
Cabling System							
Cable, Jacks etc.		lot				-	-
Fiber Optical Cable, Connectors, Patch Cord etc.		lot				-	-
Sub Total						-	-

Equipment	Type (Refer SRS Document)	Unit	Quantity	FOB (per unit) Rs.	Freight & Insurance (per unit) Rs.	Taxes & Duties* (per unit) Rs.	Total (per unit) Rs.	Total Rs.
UPS & Battery System								
Critical Load UPS							-	-
Service Load UPS							-	-
Sub Total								
IP Telephony								
IP PBX							-	-
IP Phones							-	-
Sub Total								
Printers & Others								
Network LaserJet (B/W) Printer							-	-
Media for DAT drive							-	-
Blank Cartridges for Tape Library							-	-
Sub Total								
Spares								
Spares to maintain agreed performance level								
Total								

Software

Software License - Application	Unit	Quantity	FOB (per unit)	Freight & Insurance (per unit)	Taxes & Duties* (per unit)	Total (per unit)	Total
Software License - Application							
AMR based Meter Data Acquisition & Analysis Software						-	-
Energy Audit Software						-	-
New Connection & Disconnection Management System						-	-
GIS Application						-	-
GIS based Integrated Network Analysis Software						-	-
Management Information System Software						-	-
Identify & Access Management System Software						-	-
MBC Software						-	-
Asset Management System Software						-	-
Maintenance Management System Software						-	-
Sub Total							
Misc Software & Solutions							
Enterprise Management System (EMS) Solution #						-	-
Messaging Solutions						-	-
Directory Software						-	-
SPAM Filter						-	-
IDS & Firewall System						-	-
Development of Web portal and web self service						-	-
Sub Total							

Equipment	Type (Refer SRS Document)	Quantity Unit	FOB (per unit) Rs.	Freight & Insurance (per unit) Rs.	Taxes & Duties* (per unit) Rs.	Total (per unit) Rs.	Total Rs.
Basic Software License							
Software Licenses-Server OS						-	-
Software Licenses-Anti Virus						-	-
Software Licenses-Databases						-	-
Sub Total							-
Total							-

Bandwidth Charges							
Network Connectivity Charges for Primary Link						-	-
Network Connectivity Charges for Secondary Link						-	-
Total							-

Implementation Cost							
Development of Commercial database of consumers and Data migration work as per the requirement of utility							
Installation, Testing and Commissioning/ Customization Cost**							
Total							-
Grand Total							-

#It consists Network management, Network monitoring and Network performance analysis (NMS), Network security and Helpdesk requirement

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

** Installation would include establishment and commissioning of Data Center with integration of all associated hardware and Software including networking equipment, laying and fixing of UTP, OFC cabling etc. and all software like Application software, Operating Systems, Antivirus, EMS/NMS, IDS, firewalls etc. as per relevant technical specification

5.5 Customer Care Center Cost (BoQ)

Equipment	Type (Refer SRS Document)	Unit	Quantity	FOB (per unit) Rs.	Freight & Insurance (per unit) Rs.	Taxes & Duties* (per unit) Rs.	Total (per unit) Rs.	Total Rs.
Hardware/ Equipment								
Server Hardware								
Application Server		No.					-	-
Sub Total								
Customer Care related Equipments								
Hand Set		No.					-	-
Head Set		No.					-	-
Call Switching Equipment		No.					-	-
IVRS (Interactive Voice Response System) server		No.					-	-
CTI (Computer telephony Integration) server		No.					-	-
Automatic Call Distributor		No.					-	-
Dialer		No.					-	-
Voice Logger		No.					-	-
Soft telephone		No.					-	-
Sub Total								
Server Racks								
IDF/MDF Wall Mount Racks		No.					-	-
IDF/MDF Floor Mount Racks		No.					-	-
Sub Total								
Switches								
Layer II Switch		No.					-	-
Sub Total								
Routers								
Router for MPLS/ VPN Network		No.					-	-
Sub Total								
Cabling System								
Cables, Jacks etc.		lot					-	-
Sub Total								
UPS & Battery System								
2/5 kVA UPS		No.					-	-
Sub Total								
IP Telephony								
IP PBX		No.					-	-
IP Phones		No.					-	-
Sub Total								
Workstation & Printers								
Workstation PC (including UPS, Computer chair, table etc.)		No.					-	-
Dot Matrix Printers		No.					-	-
Network LaserJet (B/W) Printer		No.					-	-
A4 Size Inkjet / Bubble Jet printer		No.					-	-
Sub Total								
Machines								
Touch Screen KIOSK		No.					-	-
IDMS along with Automatic Token Dispenser Machine		No.					-	-
Cash/ Cheque Collection KIOSK		No.					-	-
Sub Total								
Spares								
Spares to maintain agreed performance level								
Total								

	Type (Refer SRS Document)	Unit	Quantity	FOB (per unit)	Freight & Insurance (per unit)	Taxes & Duties* (per unit)	Total (per unit)	Total
Equipment				Rs.	Rs.	Rs.	Rs.	Rs.
Software								
Software License - Application								
Automated Call Distribution Software							-	-
Computer Telephony Integration Software							-	-
Answering Service Software							-	-
Interactive Voice Response Software							-	-
Softphone Software							-	-
Voice Broadcasting Software							-	-
Sub Total								
Basic Software License								
Software Licenses-Server OS							-	-
Software Licenses-Databases							-	-
Sub Total								
Total								-
Implementation Cost								
Installation, Testing and Commissioning/ Customization Cost**								-
Total								-
Grand Total								-

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

**Installation would include establishment and commissioning of Call Center along with Touch Screen Kiosk, Cash/Cheque Collection Kiosk, IDMS along with integration of CRM module with other module like GIS, MBC etc. as per the requirement including networking equipment, laying and fixing of required cabling, all software solution and equipments at Call Center as per relevant technical specification

5.6 Sub-division Office Cost (BoQ)

Number of Sub-division covered in the cost

Equipment	Type (Refer SRS Document)	Unit	Quantity	FOB (per unit) Rs.	Freight & Insurance (per unit) Rs.	Taxes & Duties* (per unit) Rs.	Total (per unit) Rs.	Total Rs.
Hardware/ Equipment								
Data Acquisition Server with Front End Processor							-	-
Sub Total								-
Switches								
Layer II Switch							-	-
Sub Total								-
Routers								
Router for MPLS/ VPN Network							-	-
Sub Total								-
Cabling System								
Cables, Jacks etc.		lot					-	-
Workstation / Equipment Cords		lot					-	-
Sub Total								-
Hardware for AMR based Data Logging System								
Data Converter Unit							-	-
Cabling, connectors and other required hardware							-	-
Sub Total								-
Modems for AMR System **								
PSTN Modem							-	-
GSM Modem							-	-
GPRS Modem							-	-
CDMA Modem							-	-
EDGE Modems							-	-
Sub Total								-
Spot Billing System								
Hand Held Spot Billing Equipment connected with Portable Printer							-	-
Sub Total								-
UPS & Battery System								
2/5 kVA UPS							-	-
Sub Total								-
IP Telephony								
IP PBX							-	-
IP Phones							-	-
Sub Total								-
Workstation PCs, Printers & Others								
Workstation PC (including UPS, Computer chair, table etc.)							-	-
Dot Matrix Printers							-	-
Slip Printer							-	-
Network LaserJet (B/W) Printer							-	-
A4 Size Inkjet / Bubble Jet printer							-	-
A3 Size Inkjet Color Printer							-	-
Line Printer							-	-
Bar Code Reader							-	-
Sub Total								-
Spares								
Spares to maintain agreed performance level							-	-
Total								-
Software								
Software License - Application								
Meter Data Acquisition & Analysis Software							-	-
Sub Total								-

Equipment	Type (Refer SRS Document)	Unit	Quantity	FOB (per unit) Rs.	Freight & Insurance (per unit) Rs.	Taxes & Duties* (per unit) Rs.	Total (per unit) Rs.	Total Rs.
Basic Software License								
Software Licenses-Server OS							-	-
Software Licenses-Databases							-	-
Sub Total								-
Total								-

Bandwidth Charges

Network Connectivity Charges for Primary Link							-	-
Network Connectivity Charges for Secondary Link							-	-
Network Connectivity and usage charges for communication between Sub division to Sub Stations, DTs etc. through respective modems for Meter data collection							-	-
Total								-

Implementation Cost

Installation, Testing and Commissioning/ Customization Cost***								
Total								-
Grand Total								-

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

** Break up for quantity of modems shall be given for Boundary Meters, Feeder Meters, DT Meters etc.

*** Installation would include establishment and commissioning of Automatic Meter Data Acquisition System at Sub Division Offices covering all the sub stations, feeders, DTs and selected consumers for data transfer and establishment and commissioning of networking equipment, laying and fixing of UTP cabling, installation of OS, Anti Virus solution etc. at the all the offices and integration with data center

5.7 Other Offices Cost (BoQ)

Offices covered in the cost	Number
Collection Centers	
Billing Centers	
Other	
Total	0

	Type (Refer SRS Document)	Unit	Quantity	FOB (per unit)	Freight & Insurance (per unit)	Taxes & Duties* (per unit)	Total (per unit)	Total
Equipment				Rs.	Rs.	Rs.	Rs.	Rs.
Hardware/ Equipment								
Switches								
Layer II Switch							-	-
Sub Total								
Routers								
Router for MPLS/ VPN Network							-	-
Sub Total								
Cabling System								
Cables, Jacks etc.		lot					-	-
Workstation / Equipment Cords		lot					-	-
Sub Total								
UPS & Battery System								
2/5 kVA UPS							-	-
Sub Total								
Workstation PCs, Printers & Others								
Workstation PC (including UPS, Computer chair, table etc.)							-	-
Dot Matrix Printers							-	-
A4 Size Inkjet / Bubble Jet printer							-	-
Line Printer							-	-
Bar Code Reader							-	-
Sub Total								
Machines								
Touch Screen KIOSK							-	-
Cash/ Cheque Collection KIOSK							-	-
Sub Total								
Spares								
Spares to maintain agreed performance level								
Total								-

Implementation Cost

Installation, Testing and Commissioning/ Customization Cost**								
Total								-
Grand Total								-

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

**Installation would include establishment and commissioning of networking equipment, laying and fixing of UTP cabling, installation of OS, Anti Virus solution etc. at all the offices and integration with data center

5.8 DGPS Survey Cost (BoQ)

Survey	Type	Unit	Quantity	FOB (per unit) Rs.	Freight & Insurance (per unit) Rs.	Taxes & Duties* (per unit) Rs.	Total (per unit) Rs.	Total Rs.
Survey								
GPS survey (Field survey)							-	-
Technical audit of substations							-	-
Technical audit of distribution transformer							-	-
Locating co-ordinates (Latitude-Longitude) and mapping of electrical network entities from 66kV/33 kV system to source of supply (i.e. poles/feeder pillar boxes (over/under ground)) of each consumer and other features using Differential Global Positioning System method.							-	-
Building of GIS network							-	-
Base maps(municipal map ,or SOI maps, satellite imageries)							-	-
Geo-referencing & Digitization of power distribution network, entities and features including consumers on base map							-	-
Collection and development of attribute data of each network entity and mapped feature							-	-
Collection of consumer data through field survey.							-	-
Integration of consumer data with GIS network							-	-
Total							-	-

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

5.9 System Metering Cost

		Unit	Quantity	FOB (per unit)	Freight & Insurance (per unit)	Taxes & Duties* (per unit)	Total (per unit)	Total
Equipment	Type			Rs.	Rs.	Rs.	Rs.	Rs.
AMR Based Meters**								
Feeder Meters							-	-
DT Meters							-	-
Sub Total							-	-
Total Cost								-

5.10 Cost not Covered in SRS

		Unit	Quantity	FOB (per unit)	Freight & Insurance (per unit)	Taxes & Duties* (per unit)	Total (per unit)	Total
Equipment	Type			Rs.	Rs.	Rs.	Rs.	Rs.
Items								
Item 1							-	-
Item 2							-	-
Item 3							-	-
.....							-	-
Sub Total							-	-
Total Cost								-

Justification for procurement of the items not covered in SRS

Item 1

Item 2

Item 3

.....

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

** Break up for quantity of system meters shall be given for Feeder & DT Meters. Cost of system meters for the project area including installation & commissioning cost of the same may be funded under R-APDRP. However, It shall be outside the scope of IT Implementing Agency.

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Volume VI: Expected Project Benefit

6.1 Project Benefit

Restructured-APDRP has been initiated by Government of India for the 11th Five Year Plan with an objective of reducing AT&C losses in the state owned electricity distribution utilities in India. The program is divided into two parts: (i) Part-A, aims at establishing base line data for accurate measurement of losses at various levels and improving customer services for the utilities; (ii) Part-B, emphasizes on system strengthening through capacity augmentation and renovation & modernization of the system.

Part-A of the scheme essentially covers

- Consumer Indexing,
- GIS Mapping,
- Asset Mapping of the entire distribution network at and below the 11 kV transformers and include the Distribution Transformers and Feeders, Low Tension lines, poles and other distribution network equipment.
- Automatic Metering (AMR) on Distribution Transformers and Feeders,
- Automatic Data Logging for all Distribution Transformers & Feeders and
- SCADA / DMS system for cities with population more than 400,000
- Adoption of IT applications for meter reading, billing & collection; energy accounting & auditing
- MIS
- Redressal of consumer grievances and establishment of IT enabled consumer service centres etc.

Benefits

Implementation of Part A by the utility will result in various benefits to the utility:

- The utility will get an accurate picture of all consumer locations, consumption, load pattern, and consumer behavior,
- Utility will get complete visibility and control of its assets along with its profile,
- Utility will be able to ensure efficient energy accounting and auditing for all its feeders and DTRs,
- It would eliminate scope for tampering and manipulation of consumer meters, reduction of theft and increase in revenue,
- It would reduce receivables, improves cash flows and eventually reduces process cycle time,
- It would help in creating a Management Information System (MIS) which will help in getting accurate and timely information, effective mechanism for decision support, enable proactive decision making, identify possible areas of energy loss, transparency in administration, tariff design etc.
- It would enhance Customer Care Services viz. quality and reliability of supply, accuracy of bills, better complaint handling and easy payment mechanism.

The above would result in the following direct benefits:

Improved Subsidy Targeting- It is well known that distribution utilities across the country provide power at relatively cheaper rates to certain section of the consumers, who are relatively poor, while those sections of society who are economically superior are charged higher tariff. However, the utilities, in the absence of accurate consumer profile and consumption information are unable to target their subsidies which results in a huge drain of financial resources in the form of subsidy which is provided by the state governments. With the implementation of Part-A, utility will have a better sense of the customers and their actual consumption and will be in a better position to target its subsidy. In addition, better profiling of the customers will give the utility an opportunity to identify consumers who indulge in malpractices and prevent it.

Loss Reduction- The GIS mapping with consumer indexing and AMR metering will help in localizing the loss levels in each of the cities and on each of the feeders. This will help the management to get a better sense of the areas where major loss or theft of power is taking place. Localization of the issue and getting a better sense of the losses through this process will help the utility to reduce around 10 to 20% of its losses through better surveillance without making any additional investment.

Asset Management- Asset mapping can help in cost management for the utility through better inventory management and better maintenance of their assets.

Carbon Credit - Around 80% of power in the country is generated from the thermal sources. One unit of power saved would lead to reduction in generation of about 1.5 units of power. Thus, loss reduction in Part-A would contribute in the form of carbon emission reduction.

Expected Benefits from the Project

[Loss Reduction]

[Customer Service & Customer Satisfaction]

[System Reliability]

[Other Benefits]

6.2 Cost Benefits Analysis

Illustrative

Assumptions*				
No.	Description	Unit	Value	Comments
1	Average load getting affected during each interruption	kW	2000	
2	Average revenue associated per kW of load	Rs.	84	
3	Average load per DTR	kW	100	
4	Number of DTRs in the Project Area	No.	20000	
5	Average Load per 100cktkm line	kW	10000	
6	Average duration per interruption	mins	30	
7	Increase in sales in per unit decrease in AT&C losses	%	70%	
8	Decrease in power purchase in per unit of decrease in AT&C losses	%	30%	
9	Average Tariff	Rs./Unit	3.5	
10	Average power purchase cost	Rs./Unit	2.5	
11	Total energy input	MUs	2000	
12			
13			
14			
15			

One Time Setup Cost								
		Phasing (Rs. Cr.)						Total
		Q1	Q2	Q3	Q4	Q5	Q6	
Total Setup Cost		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Any Other Cost not included in the scope of work under R-APDRP	Rs.Cr.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		0.00	0.00	0.00	0.00	0.00	0.00	0.00

Recurring Costs							
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
Annual FMS Charges	Rs.Cr.	0.00	0.00	0.00	0.00	0.00	0.00
Any other cost incurred due to new application	Rs.Cr.						0.00
Total	Rs.Cr.	0.00	0.00	0.00	0.00	0.00	0.00

Annual Economic Benefits

Description	Unit	Current Value	Comments	Expected Value after one year of complete execution of Project	Comments	Annual Economic Value in (Rs.Cr.)
Availability						
System Average Interruption Duration Index (SAIDI)-Monthly	Hours	15.5		8		1.512
Transformer Failure Rate	Percentage	8%		5%		0.504
Customer Average Interruption Duration Index	Minutes per i	1.5		0.5		
Overhead Line Failure Rate Faults	per100cktkm	2%		1%		0.00042
Reliability						
System Average Interruption Frequency Index	Instances					
Cost						
AT & C Losses - due to implementation of Part A	Percentage	35%		30%		32
Return on Capital Employed (ROCE)	Percentage					
O&M Expenses per unit of Energy Input	Rs./Unit	0.25		0.2		10
Any Other Quantifiable Benefit						
Benefit 1						
Benefit 2						
Total						44.02

Cash Flow Analysis

Year		Incremental Inflow	Incremental Outflow	Net Inflow
		Rs. Cr.	Rs.Cr.	Rs.Cr.
1		44.02	0.00	44.02
2		44.02	0.00	44.02
3		44.02	0.00	44.02
4		44.02	0.00	44.02
5		44.02	0.00	44.02
6		44.02	0.00	44.02
7		44.02	0.00	44.02
8		44.02	0.00	44.02
9		44.02	0.00	44.02
10		44.02	0.00	44.02
ERR	%	#DIV/0!		
Payback Period	Years	0.00		

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Annexure A: Implementation Schedule

Instructions

Write "1" in the cell if activity is underprogress during the month otherwise leave blank

Activity/ Sub Activity	Start Date	End Date
------------------------	------------	----------

No.	Activity/ Sub Activity	Start Date	End Date
1	Issue of NIT		
2	Award of Contract		
3	Mobilization at site with establishment of site office, requisite resource deployment etc.		
4	System Design (Pre-Implementation Plan, Testing and Development) and Approval from the owner		
5	Field Survey for Consumer Indexing & Asset mapping & GIS System Implementation		
6	Establishment of Data Center		
7	Implementation of AMR System		
8	Establishment of First Customer care center (First Customer care center after completion of work at all sub divisions under the requisite town, for town wise establishment of CC Center) -		
9	Creation of IT Infrastructure at Other Utility offices viz. Division, Circle etc. (In a phased manner for associated completed sub division wise) -		
10	Integration of entire IT infrastructures created at data center, Sub division offices, Customer care centers, Electrical sub stations and other utility offices on a GIS platform with Acceptance / Performance test		

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Annexure B: Office Detail (Project Area)

Stores	Regional Accounting	Billing Center	Customer Care Center	Collection Center	Other
S1	RAO1	BC1	CCC1	CC1	O1
S2	RAO2	BC2	CCC2	CC2	O2
S3	RAO3	BC3	CCC3	CC3	O3
S4	RAO4	BC4	CCC4	CC4	O4



Annexure B: Office Detail (Project Area) - Cont...

Head Office	Regional Office	Circle Office	Division Office	Sub-division Office	Distribution Center	Other (if any)	Other (if any)
Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8
HO1	RO1	CO1	DO1	SDO1	DC1		
					DC2		
					DC3		
					DC4		
				SDO2	DC1		
					DC2		
					DC3		
					DC4		
			DO2	SDO1	DC1		
					DC2		
					DC3		
					DC4		
				SDO2	DC1		
					DC2		
					DC3		
					DC4		
		CO2	DO1	SDO1	DC1		
					DC2		
					DC3		
					DC4		
				SDO2	DC1		
					DC2		
					DC3		
					DC4		
			DO2	SDO1	DC1		
					DC2		
					DC3		
					DC4		
				SDO2	DC1		
					DC2		
					DC3		
					DC4		
	RO2	CO1	DO1	SDO1	DC1		
					DC2		

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 Annexure D: Application Information

Application Name & functional description	Stand-alone /Integrated Application	Other applications integrated with?	Future Plans (Phase out or continue)	Application Type - Batch (BCH), Online (ON), PC, Client Server (CS), Web (WEB)	Hours of Application Availability to Business (Days X Hours)	Vendor name, release	Make/ Version	Number of Licences	Platform	OS	Database
Central Billing	Stand-alone	NA	Phase Out	PC	5x8	ABC Rel 5	Version 6.1	10	Unix	Windows 2003	Access
Employee Leave Application	Integrated	Salary Application	Continue	Web	7x24	XYZ 1.0	Version 7.8	12	Unix	Windows	MS SQL 6.5

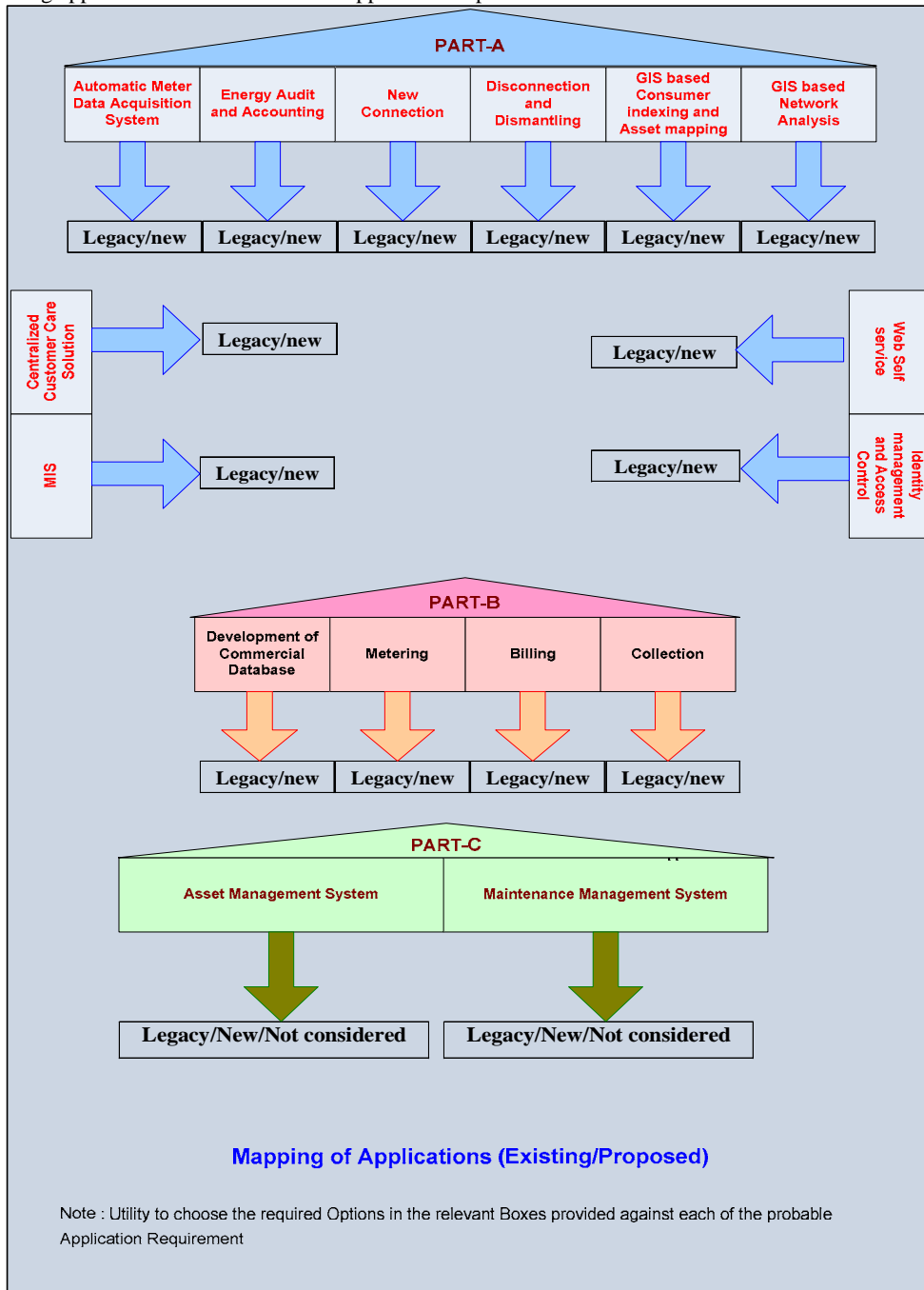
Annexure D: Application Information - Cont...

Application Name & functional description	Languages	Third Party Tools	Any run time licenses ex. Testing tools	Total FTEs	Location of Resources	Stability (H/M/L)	Business Criticality (H/M/L)	Application Complexity (H/M/L)	Documentation Available (Y/N)	Number of Concurrent Users (High:100+, Med:10-100, Low:<10)	Comments
Central Billing	VB6	NA	Crystal Report 8.5			M	H	H	Yes	1	PC based. only 1 user operates.
Employee Leave Application	.Net	Access control tool.	NA			H	M	L	No	90-100	Online app for all employees to manage their leaves

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Detail Project Report - Town with Data Centre Annexure E: IT Application Map

'An exhaustive IT application map for distribution business is given in the diagram below. The utility is requested to use this map to show the applications that already exist in its landscape or proposed in the DPR. The list of existing application and details of each application is provided in the DPR format at Annexure D.



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Part III: Check List

Check the following information required to be filled in the Formats		
<i>Index</i>		
Date of submission	Yes/No	No
<i>Declaration Form</i>		
Declaration Form has been read and signed by designated authority	Yes/No	
<i>Guidelines</i>		
We have gone through the Guidelines of Part-A and confirm compliance of the same till the completion of the project	Yes/No	
<i>Volume I</i>		
Stated objectives of the Project	Yes/No	
<i>Volume II.a</i>		
Name of the State	Yes/No	Yes
State Power Sector Information	Yes/No	
State Map	Yes/No	
<i>Volume II.b</i>		
Name of the Utility	Yes/No	Yes
Other basic information related to Utility	Yes/No	
Utility's Consumer Information	Yes/No	
Utility's Asset Information	Yes/No	
Utility's key Commercial and Financial Information	Yes/No	
Scope		
Organisational Setup		
<i>Volume III</i>		
Consumer Indexing & Asset Mapping Information	Yes/No	
Customer Care Center Information	Yes/No	
MBC & Energy Audit Processes	Yes/No	
Application Information	Yes/No	
Hardware Information	Yes/No	
Networking Information	Yes/No	
Website Information	Yes/No	
<i>Volume IV.a</i>		
Basic information about project area	Yes/No	
Consumer Information	Yes/No	
Asset Information	Yes/No	
Commercial Information	Yes/No	
<i>Volume IV.b</i>		
Consumer Metering Information	Yes/No	
Asset Metering Information	Yes/No	
Consumer Indexing & Asset Mapping Information	Yes/No	
Customer Care Center Information	Yes/No	
<i>Volume IV.c</i>		
Filled in all the information asked in the Format	Yes/No	

<i>Project Cost Information</i>		
Volume V.a: Whether FMS Charges & cost not funded under R-APDRP for implementation of Part-A has been mentioned in the format?	Yes/No	
Volume V.b: Whether full cost of material required to ring-fence the project area has been built in the project cost?	Yes/No	
Volume V.c: Whether full project management cost has been built in the project cost?	Yes/No	
Volume V.d: Whether per unit material cost and quarter-wise quantity is mentioned for the Data Center?	Yes/No	
Volume V.e: Whether per unit material cost and quarter-wise quantity is mentioned for the Customer Care Center?	Yes/No	
Volume V.f: Whether per unit material cost and quarter-wise quantity is mentioned for the Sub-division Offices?	Yes/No	
Volume V.g: Whether per unit material cost and quarter-wise quantity is mentioned for the Other Offices?	Yes/No	
Volume V.h: Estimated GIS Survey cost is incorporated in the project cost?	Yes/No	
Volume V.i: Whether per unit material cost and quarter-wise quantity is mentioned for system metering?	Yes/No	
Volume V.i: Whether cost not covered in SRS, if any, incorporated along with details and justification for the same?	Yes/No	
<i>Volume VI.b</i>		
Have value of all the assumptions been filled in the benefit sheet?	Yes/No	
Has economic value of benefits been calculated on the basis of assumptions and mentioned in the format?	Yes/No	
<i>Annexure A</i>		
Implementation Schedule completed and attached with the DPR	Yes/No	
<i>Annexure B</i>		
Offices detail completed and attached with the DPR	Yes/No	
<i>Annexure C</i>		
Whether hard copy of the SLDs are attached with the DPR?	Yes/No	
Whether soft copy of the SLDs are attached with the DPR?	Yes/No	
Whether hard copy of the Nodal Diagrams are attached with the DPR?	Yes/No	
Whether soft copy of the Nodal Diagrams are attached with the DPR?	Yes/No	
<i>Annexure D</i>		
Application details completed and attached with the DPR	Yes/No	
<i>Annexure E</i>		
IT Application Map completed and attached with the DPR	Yes/No	
<i>Annexure F</i>		
Check List completed and attached with the DPR	Yes/No	