An initiative of

Ministry of Power, Government of India

Restructured Accelerated Power Development and Reforms Programme

Nodal Agency

Power Finance Corporation Ltd.

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	0

Submitted to

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

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

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

Index

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

Table of Contents **Page Number**

I Part I: Guidelines for Part-A

II Part II

1 Declaration

2 Executive Summary

3 Volume I: Introduction

4 Volume II: State-Utility Profile

5 Volume III: As-Is of Utility

6 Volume IV: Project Area Details

7 Volume V: Project Cost Estimate

8 Volume VI: Expected Project Benefit

9 Annexure A: Implementation Schedule

10 Annexure B: Office Detail (Project Area)

11 Annexure C: Asset Hirarchy

12 Annexure D: Application Information

13 Annexure E: IT Application Map

III Part III: Check List

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

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 Date 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.

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

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)

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

Executive Summary

State Profile

Name of the State	#Name	Madhya Pradesh

Brief Utility Profile

Name of the Utility	#Name	XVZ Distribution Utility
Location of Data Center	#Name	0
Name of the IT Consultant (If appointed)	#Name	ABC Consulting Firm

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

Covered in first Project Area DPR. **DPR No.** Part-A 001/Utility/ v1

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	Total 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	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							
Software							
Bandwidth Charges							
Implementation Cost							
Sub Total							
Customer Care Center							
Hardware							
Software							
Implementation Cost							
Sub Total							
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**

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

Volume I: Introduction

1.1 Background

Covered in first Project Area DPR. **DPR No.** Part-A 001/Utility/ v1

1.2 Objective of the Project

Covered in first Project Area DPR. **DPR No.** Part-A 001/Utility/ v1

Volume II: State-Utility Profile

2.1 State Profile

State	#Name	Madhya Pradesh

Covered in first Project Area DPR. **DPR No.** Part-A 001/Utility/ v1

2.2 Utility Profile

Name of Utility	#Name	XVZ Distribution Utility
Location of the Data Center in the Utility	#Name	
IT Consultant	Name	ABC Consulting Firm

Covered in first Project Area DPR. **DPR No.** Part-A 001/Utility/ v1

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				

Volume III: As-Is of Utility

3.1 As-Is of the Utility

Covered in first Project Area DPR. **DPR No.** Part-A 001/Utility/ v1

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without 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	
If yes, provide detail of the Pilot Area identified		
Name of the Pilot Area	#Name	
Adminstrative Setup	Circle/Divi	
Number of Offices falling under*		**Project 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

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									

4.1.3 Asset Information

Assets**		Project 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-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	
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		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		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

4.3.1 Data Center and Control Facilities

4.3.1.1 Database Server with Application

Not Required

Other Servers

Not Required

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

Not Required

4.3.1.7 Passive Items at Data Center

Not Required

4.3.1.8 Application Software

4.3.1.9 Customet Care Center

Not Required

4.3.1.10 AMR Based Data Logging System for Town

[Brief write up]

4.3.1.11 Misc. Items for Towm

[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 Exisitng Applications to be sunset

[Brief write up]
Justification for the applications to be sunset.

4.3.1.15 Application Integration

[Brief write up]

[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

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 - Towns without Data Centre
Volume V: Project Cost Estimate

5.1 Summary of Project Cost

Particular		Total Cost	Expenditure Phasing Q1	Q2	Q3	Q4	Q5	Q6
		Rs. Lac	Rs. Lac	Rs. Lac	Rs. Lac	Rs. Lac	Rs. Lac	Rs. Lac
IT Consultant deployment Cost		-						
Ring-Fencing Cost		-						
Project Management Cost		-						
Data Center								
Hardware								
Software		Not Required						
Bandwidth Charges								
Implementation Cost								
Sub Total								
Customer Care Center								
Hardware								
Software		Not Required						
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		Time shall start after completion of acceptance test 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 succesful 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

Equipment	Type	Unit	Quantity	FOB (per unit)	Freight & Insurance (per unit)	Taxes & Duties* (per unit)	Total
			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.

5.4 Data Center Cost (BoQ)

Covered in first Project Area DPR. **DPR No.** Part-A 001/Utility/ v1

5.5 Customer Care Center Cost (BoQ)

Covered in first Project Area DPR. **DPR No.** Part-A 001/Utility/ v1

5.6 Sub-division Office Cost (BoQ)

Number of Sub-division Offices covered in the Scope

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								-
Basic Software License								
Software Licenses-Server OS							-	-
Software Licenses-Databases							-	-
Sub Total								-
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.
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 Scope	Number
Collection Centers	
Billing Centers	
Other	
Total	**0**

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								
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 the 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

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

5.10 Cost not Covered in SRS

Equipment	Type	Unit	Quantity	FOB (per unit) Rs.	Freight & Insurance (per unit) Rs.	Taxes & Duties* (per unit) Rs.	Total Rs.	Total Rs.
Items								
Item1							-	-
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.

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 Satisfection]

[System Reliability]

[Other Benefits]

6.2 Cost Benefits Analysis

Illustrative

Assumptions*

	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.)						
		Q1	Q2	Q3	Q4	Q5	Q6	Total
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		

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

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
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	Implementation of AMR System		
7	Creation of IT Infrastructure at Other Utility offices viz. Division, Circle etc. (In a phased manner for associated completed sub division wise) -		
8	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		

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

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		

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

Annexure C: Asset Hirarchy

1 Utility shall submit SLDs of the complete network of the Project Area along with the following information.

2 SLDs shall be submitted in hard and soft format along with the DPR

3 Nodal diagram showing the geographical map showing electrical distribution network in Project Area indicating EHV and HV S/s, lines upto 11 KV and DTRs shall be enclosed as an exhibit.

SI No. of EHT SS	Name of the EHT SS	Number of Power Transformers	Capacity of the EHT SS (in MVA)	SI No. of 33 kV feeder	Name of the 33 KV feeder	Size of the conductor	Length of the feeder (kM)	Sl.No. of 33/11 kV SS	Name of the 33/11 kV SS

Annexure C: Asset Hirarchy - Cont…

Number of Power Transformers	Capacity of the 33/11 kV SS (in MVA)	Sl.No. of 11 kV feeder	Name of the 11 KV Feeder	Size of the Conductor	Length of the feeder (kM)	No. of DTRs	Capacity of DTRs (in kVA)

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

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…

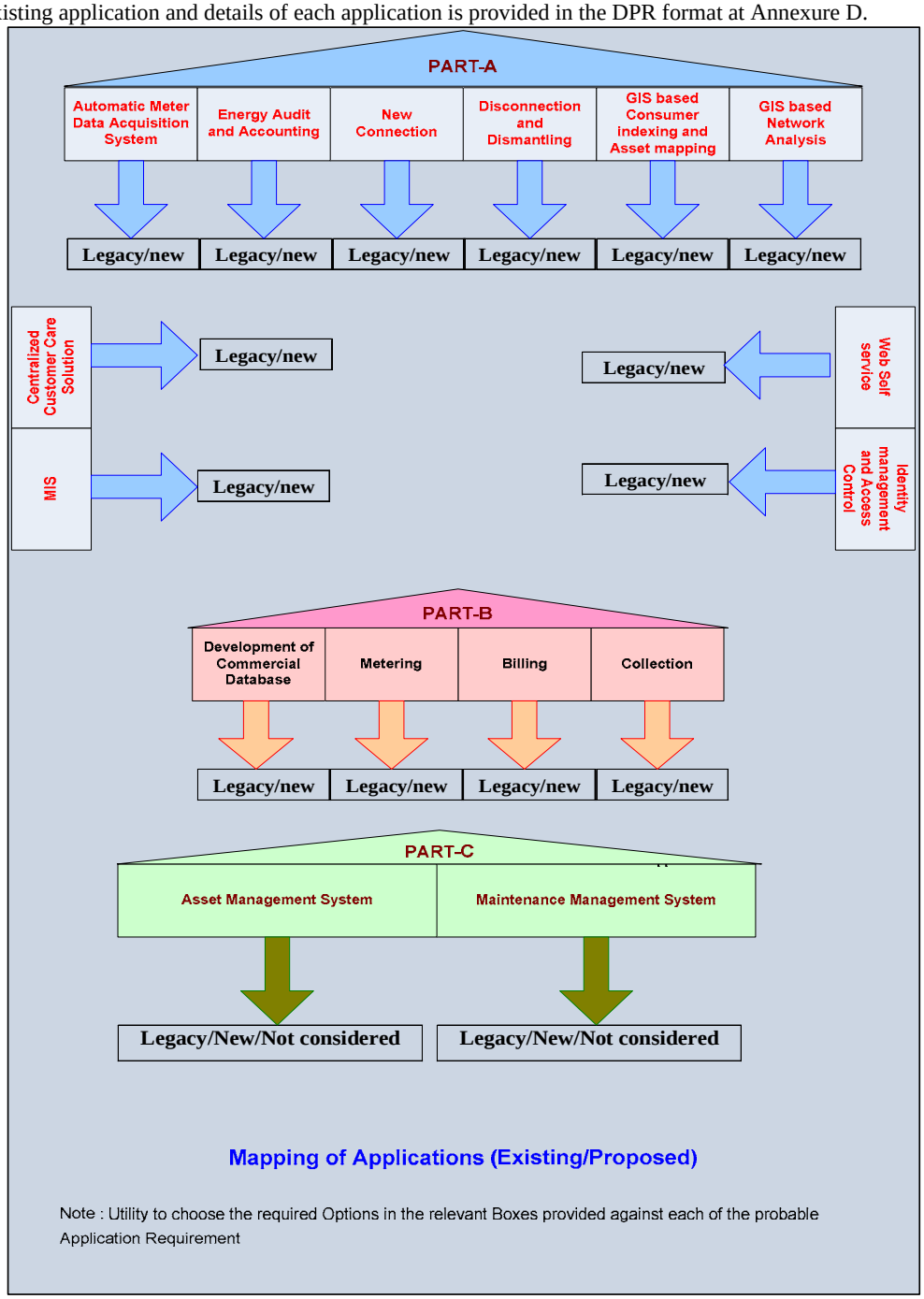
Application Name & functional description	Languages	Third Party Tools	Any run time licenses ex, Testing tools	Total FTEs	Location of Resources	Stability (H/M/L)	Business Criticality (H/M/L)	Application Complexity (H/M/L)	Documentation Available (Y/N)	Number of Concurrent Users (High:100+, Med:10-100, 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

POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without 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.



POWER FINANCE CORPORATION LTD.

Detail Project Report - Towns without Data Centre

Part III: Check List

Check the following information required to be filled in the Formats		
Index		
Date of submission	Yes/No	
Declaration Form		
Declaration Form has been read and signed by designated authority	Yes/No	
Guidelines		
We have gone through the Guidelines of Part-A and confirm compliance of the same till the completion of the project	Yes/No	
Volume I		
Stated objectives of the Project	Yes/No	
Volume II.a		
Name of the State	Yes/No	
Volume II.b		
Name of the Utility	Yes/No	
Volume IV.a		
Basic information about project area	Yes/No	
Consumer Information	Yes/No	
Asset Information	Yes/No	
Commercial Information	Yes/No	
Volume IV.b		
Consumer Metering Information	Yes/No	
Asset Metering Information	Yes/No	
Consumer Indexing & Asset Mapping Information	Yes/No	
Customer Care Center Information	Yes/No	
Volume IV.c		
Filled in all the information asked in the Format	Yes/No	
Project Cost Information		
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.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	
Volume VI.b		
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	
Annexure A		
Implementation Schedule completed and attached with the DPR	Yes/No	
Annexure B		
Offices detail completed and attached with the DPR	Yes/No	
Annexure C		
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	
Annexure D		
Application details completed and attached with the DPR	Yes/No	
Annexure E		
IT Application Map completed and attached with the DPR	Yes/No	
Annexure F		
Check List completed and attached with the DPR	Yes/No	