



पावर फाइनेंस कॉर्पोरेशन लिमिटेड POWER FINANCE CORPORATION LTD.

(भारत सरकार का उपक्रम)

(A Govt. of India Undertaking)

(आई.एस.ओ. 9001:2015 प्रमाणित)

(ISO 9001:2015 Certified)

No:02:10:IPDS:2018:Impact Study:WR: | 56356

14th May 2018

To,

All MDs/CMDs/Head of Utility
(As per List enclosed)

Sub: Appointment of Consultant appointed for Impact Assessment Study and Evaluation of Project Implementation for the RAPDRP Scheme

Madam/Sir,

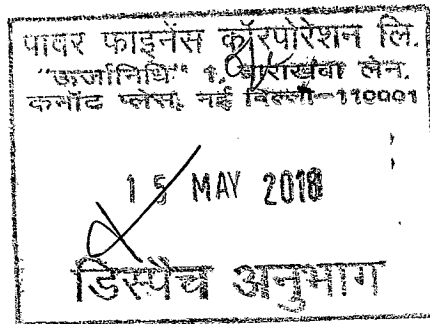
This is to intimate you that as per the direction of Ministry of Power, PFC has initiated for appointment of four regional consultants to carry out Impact Assessment Study and Evaluation of Project Implementation for the RAPDRP Scheme (subsumed under IPDS). Accordingly, **M/s CRISIL** has been appointed to undertake the assignment in Western region states and their representatives would visit various project areas to complete the assignment within the schedule time of 90 days, along with submission of first draft report within 45 days w.e.f. 10th May 2018.

During the process of the said assessment, agency would be collecting the required MIS data for this exercise from the selected cities/towns covered under R-APDRP scheme in your Utility. Since the assessment would be a time bound activity, it is requested that the representatives of M/s CRISIL be provided with the required support and cooperation from various field Units and Head Quarter office during the period of such assessment.

You are requested to kindly sensitize the field units to provide the final executed BoQ of RAPDRP Schemes in selected sample towns and extend the required support to them, so that the work can be completed in time. Scope of work for the said assignment and tentative list of towns selected randomly in your Utility from the towns where projects sanctioned under RAPDRP have been completed, are enclosed for your reference. We seek your kind co-operation and support.

Thanking you,

Yours faithfully,



(Subir Saha)
ED (IPDS)

- Encl.:
1. Scope of work
 2. List of sample towns in WR States

List of Discoms:

- 1) CSPDCL, Chhattisgarh
- 2) GED, Goa
- 3) DGVCL, Gujarat
- 4) MGVCL, Gujarat
- 5) PGVCL, Gujarat
- 6) UGVCL, Gujarat
- 7) MP-E
- 8) MP-W
- 9) MP-C
- 10) MSEDCL, Maharashtra

Scope of work

The agency in each region shall be required to study the impact of project implementation on Customers, Utility and to evaluate the project implementation on the basis of parameters, as detailed below:

Customer perspective

- Ease in lodging complaint and tracking them from Centralized Customer Care Center and the effectiveness of the Utility in addressing them.
- System of feedback to consumers after addressing the complaints.
- Ease in application process for applying for New connection/Name change/Load change/category change etc. by consumers and tracking them from Centralized Customer Care Center
- Timely release of new connections within the SERC timelines.
- Easy availability of bills; past consumption pattern, payment history, due date reminders on Mobile
- Correctness of bills and error resolution process
- Enhancement in Consumer convenience through facility of Multiple Payment Options (Credit cards, debit card, net banking, Wallet, BHIM App/UPI etc.) and its effect on reducing receivables, increasing cash flows and reducing process cycle times.
- Enhancement in Consumer satisfaction because of improvement in Quality and reliability of power supply.
- Prior information to consumers through SMSs from CCC regarding power outages.
- Impact on per-capita energy consumption of Consumers.
- Enhancement in Industrial and commercial activity.

Utility perspective

- Town-wise segregation of AT & C loss by ring fencing through boundary meters.
- Identification of loss pockets through accounting of energy at Feeder and DT level.
- Impact of GIS mapping of Assets and Consumers in monitoring and updating the system in a dynamic and continuous mode.
- Profiling of Consumers for targeting the subsidies at the right set of consumers.
- Update of consumers when the new connections are released through GIS system.
- Update of Assets whenever any new Asset is added/deleted in the system
- Processing of all commercial data (metering, billing, collection) from a centralized facility (Data Center)
- Creation of Management Information System for getting information and for taking pro-active decisions and administrative measures towards reducing loss and for tariff designs.
- Quality and Reliability of power in terms of reduction in outages, improvement in voltage profile, load balancing and stability of frequency.
- Reduction in theft due to HVDS and underground & AB cable.
- Improvement in Billing and Collection efficiency through metering of unmetered connections, replacement of faulty electro-mechanical meters.

- Improvement in HT/LT ratio.
- Availability of information on the town-wise E-payment/Digital payment for targeting efforts for improving them.
- Real time monitoring and control of Sub-stations and Distribution networks through automation under SCADA for accurate load fore-casting and quick emergency response.

Project implementation and adherence to Systems and Procedures

- Adherence of timelines towards completion of the project and meeting contractual obligations.
- Mode of tendering and execution, process of award, approval hierarchy and timelines between various activities from NIT to Award in relation to actual versus scheduled.
- Quality and Inspection system procedure and documents availability, like Field Quality plan and Manufacturer Quality Plan and their adherence.
- Compliance to Type Testing requirement for major equipment (actual type test or on the basis of Type Test reports)
- Availability of Routine and Acceptance test reports, Commissioning and Electrical energisation (charging) reports for major equipment
- Availability of documentation, like Construction practices, O&M manuals, Standard operating procedures, Emergency response procedures and their availability and display at proper places.
- Physical verification of the assets installed and commissioned under the Schemes as per the stipulated procedure.
- Safety assessment of the live equipment.
- Compliance to technical specification in guidelines/sanctioned DPR/ specified in the Letter of Award.

The scope of work as detailed above is not exhaustive and may include any other parameter which may emerge during the currency of the contract and which is necessary for fulfilling the objective of the Study.

Brief approach and methodology

- i) The agency will have to collect data for the selected towns from the Data centre of the State.
 - a. Report on town-wise AT&C Loss for the period of not more than 12 months. AT&C data to be compared with the Baseline AT&C losses. The details of Consumer/Sales mix of the identified town to be collected.
 - b. Feeder-wise AT&C loss trajectory for 15% feeders in the identified town. (minimum 1 feeder where no. of feeder is less)
 - c. Feeder-wise Power factor for 15% feeders in the identified town. (minimum 1 feeder where no. of feeder is less)
 - d. Report on Outages (incl. number of outages, nature of outages, duration of outages etc.)
 - e. Report on release on new connection through R-APDRP Part A systems
 - f. Report on Consumer Care Center (CCC) covering details like
 - i. Consumer coverage by the CCC
 - ii. Average monthly complaints received and redressed by CCC.

- iii. Number of consumer registered for Web Self Service (WSS)
 - iv. Average monthly complaints received and redressed through WSS.
 - v. New connection request thru WSS
 - vi. Avg. time taken in release of New Connection (category wise)
 - vii. Average monthly usage of self-service Kiosk at CCC.
- ii) Interaction with Field officers in the selected towns to assess actions taken by the Utility to improve/ to achieve the desired objective of the scheme.
 - iii) Field Visit for physical verification of the important assets on sampling basis on the following basis:
 - a. 5% of length of Feeder works (33 KV/22KV/11KV/LT) ,subject to minimum of 2 Km.
 - b. 10% of length of ABC Cables, subject to minimum of 2 Km.
 - c. 50% New Sub-Stations, subject to minimum of 1 Sub-station.
 - d. 15% of New DTs, subject to minimum 5 DTs.
 - e. 10% of DT Meters, subject to minimum 5 DT meters.
 - f. 100% Feeder Meters/Boundary Meters.
 - g. 1% or 50 number of Consumer Meters whichever is less.
 - h. Data communication from Sub-station in SCADA control room.
 - i. Logging of Data in SCADA control room
 - j. Demonstration of remote operation and control from SCADA control room.
 - iv) Interaction with Consumers through sample surveys for collection of Primary Data on Consumer perspective.
 - v) Analysis of Data/Reports of all the towns in order to assess the qualitative as well as quantitative improvement over the baseline levels outlining the Benefits derived from the scheme, actions taken and best practices adopted by the Utility to achieve the desired objective of the scheme.

Deliverables

The deliverables shall be:

- Report on evaluation of project implementation and outcomes from R-APDRP Impact Assessment study covering the scope as detailed above. The benefits achieved from the scheme may be categorized into tangible and intangible. The tangible benefits may be monetized and shown in the report.
- Sample template/format for collecting the data for preparing the comprehensive report may be finalized in consultation with PFC during the course of work.

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List of Town selected for Impact Assessment Study in WR States

State_Name	Discom_Name	Town Name	Population as per census 2001	Town_Golive_Part_A	SCADA_Completion	Part_B_Completion	
Chhattisgarh	CSPDCL	Rajnandgaon	143770	Yes		Yes	
		Kawardha	32415	Yes		Yes	
		Bhatapara	50118	Yes		Yes	
		Durg Bhilai nagar	927864	Yes		Yes	
Goa	Goa-PD	Panaji	99677	Yes			
Gujarat	DGVCL	Vapi	71406	Yes		Yes	
		Bharuch	176364	Yes		Yes	
	MGVCL	Vadodara	1491045	Yes	Yes	Yes	
		Balasinor	33705	Yes		Yes	
		Dabhoi	54952	Yes		Yes	
	PGVCL	Jamnagar - navagam ghed	556956	Yes		Yes	
		Wadhwan	219585	Yes		Yes	
		Amreli	95307	Yes		Yes	
		Morvi	178055	Yes		Yes	
		Mahuva	80726	Yes		Yes	
		Gariadhar	30526	Yes		Yes	
		Sihor	46960	Yes		Yes	
	UGVCL	Dehgam	38082	Yes		Yes	
	Madhya Pradesh	MPMKVVCL-C	Gwalior (m.corp.)	865548	Yes	Yes	Yes
Harda (m)			64497	Yes		Yes	
Hoshangabad (m)			97424	Yes		Yes	
Itarsi (m)			107831	Yes		Yes	
Raisen (m)			35702	Yes		Yes	
Sarni (m)			95012	Yes		Yes	
MPPKVCL-E		Chhindwara	153552	Yes		Yes	
		Katni	187029	Yes		Yes	
		Maihar	34342	Yes		Yes	
		Narsingpur	56203	Yes		Yes	
		Seoni	89801	Yes		Yes	
MPPKVCL-W		Dhar	75374	Yes		Yes	
		Jhabua	30577	Yes		Yes	
		Mandsaur	117555	Yes		Yes	
		Ratlam	234419	Yes		Yes	
		Ujjain	431162	Yes		Yes	
			Achalpur	107316	Yes		Yes
			Ahmadnagar	347549	Yes		Yes
			Amravati	549510	Yes	Yes	Yes
	Ballarpur		89995	Yes		Yes	
	Barshi		104785	Yes		Yes	

List of Town selected for Impact Assessment Study in WR States

State_Name	Discom_Name	Town Name	Population as per census 2001	Town_Golive_Part_A	SCADA_Completion	Part_B_Completion
Maharashtra	MSEDCL	Dahanu	44401	Yes		Yes
		Gangakhed	40428	Yes		Yes
		Gondiya	120902	Yes		Yes
		Igatpuri	31539	Yes		Yes
		Kamptee	136491	Yes		Yes
		Kolhapur	505541	Yes	Yes	Yes
		Latur	299985	Yes		Yes
		Lonavala	55652	Yes		Yes
		Malegaon	409403	Yes	Yes	Yes
		Manmad	72401	Yes		Yes
		Mehkar	37715	Yes		Yes
		Nalasopara	284538	Yes		Yes
		Nanded-waghala	430733	Yes		Yes
		Parola	34799	Yes		Yes
		Pathri	32001	Yes		Yes
		Ratnagiri	70383	Yes		Yes
		Solapur	872478	Yes	Yes	Yes
		Vasai	174396	Yes		Yes
Wadgaon road	30756	Yes		Yes		
Yavatmal	139835	Yes		Yes		