



# 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:ER: 56340

14<sup>th</sup> 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**

Sir,

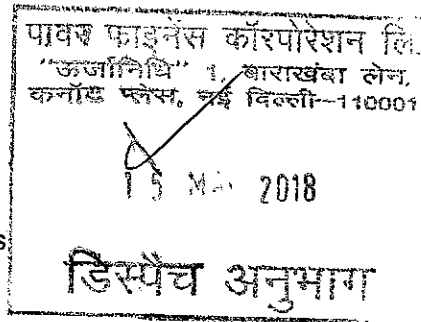
This is to intimate you that as per the direction of Ministry of Power, PFC has initiated for appointment of four regional consultants to carry out Impact Assessment Study and Evaluation of Project Implementation for the RAPDRP Scheme (subsumed under IPDS). Accordingly, **M/s Voyants Solutions Pvt. Ltd.** has been appointed to undertake the assignment in Eastern and North-Eastern 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. 10<sup>th</sup> 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 Voyants 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,



*(Signature)*  
(Subir Saha)  
ED (IPDS)

Encl.:

- 1.Scope of work
- 2.List of sample towns in ER and NER States

**List of Discoms:**

- 1) APDCL, Assam
- 2) NBPDC, Bihar
- 3) SBPDCL, Bihar
- 4) JBVNL, Jharkhand
- 5) WBSSEDCL, WB
- 6) Arunachal Pradesh
- 7) Manipur
- 8) Meghalaya
- 9) Mizoram
- 10) Nagaland
- 11) Tripura
- 12) Sikkim

### **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.



**List of the Towns selected for Impact Assessment Study in ER and NER States**

State_Name	Discom_Name	Town Name	Population as per census 2001	Town_Golive_Part_A	SCADA_Completion	Part_B_Completion	
Bihar	NBPDC	Sonepur	33490	Yes		Yes	
		Narkatiaganj	40830	Yes		Yes	
		Kishanganj	85590	Yes		Yes	
		Katihar	190873	Yes		Yes	
		Purnia	197211	Yes		Yes	
	SBPDCL	Darbhanga	267348	Yes		Yes	
		Makhdumpur	30109	Yes		Yes	
		Rajgir	33738	Yes		Yes	
		Jamui	66797	Yes		Yes	
		Sasaram	131172	Yes		Yes	
	Jharkhand	JBVNL	Munger	188050	Yes		Yes
			Patna	1697976	Yes	Yes	Yes
			Patratu	32134	Yes		Yes
			Chaibasa	63648	Yes		Yes
			Sahebganj	80154	Yes		Yes
West Bengal	WBSEDCL	Hazaribagh	135473	Yes		Yes	
		Phusro	174402	Yes		Yes	
		Diamond harbour	37234	Yes		Yes	
		Kalimpong	42998	Yes		Yes	
		Rampurhat	50613	Yes		Yes	
		Bisnupur	61947	Yes		Yes	
		Koch bihar	103008	Yes		Yes	
		Darjiling	108830	Yes		Yes	
		Baharampur	170322	Yes		Yes	
		Habra	239209	Yes		Yes	
		Kharagpur	272865	Yes		Yes	
		Barddhaman	285602	Yes		Yes	
		Siliguri	472374	Yes	Yes	Yes	
Arunachal Pradesh	Arunachal-PD	Asansol	1067369	Yes	Yes	Yes	
Assam	APDCL	Itanagar	35022	Yes			
		Dergaon	13446	Yes		Yes	
		Nalbari	23183	Yes		Yes	
		Golaghat	33064	Yes		Yes	
		Goalpara	49037	Yes		Yes	
		Lumding	50570	Yes		Yes	
		Diphu	52310	Yes		Yes	
		Karimganj	52613	Yes		Yes	
		Sivsagar	53854	Yes		Yes	
		Nagaon	123265	Yes		Yes	
		Dibrugarh	137661	Yes		Yes	
		Jorhat	137814	Yes		Yes	
		Silchar	184105	Yes		Yes	
		Guwahati	818809	Yes	Yes	Yes	
Manipur	Manipur-PD	Bishnupur	10264	Yes		Yes	
		Imphal city	250234	Yes		Yes	
		Thoubal town	41174	Yes		Yes	
Meghalaya	MePDCL	Jowai	25057	Yes		Yes	
Mizoram	Mizoram-PD	Lunglei	47137	Yes		Yes	
		Serchhip	17096	Yes		Yes	
Nagaland	Nagaland-PD	Dimapur	98096	Yes			
Sikkim	Sikkim-PD	Gangtok	29354	Yes		Yes	
Tripura	TSEC	Kumarghat	11593	Yes		Yes	
		Jogendranagar	34850	Yes		Yes	
		Agartala	189998	Yes		Yes	