

# आर-एपीडीआरपी योजना

## विद्युत वितरण कंपनियों में सूचना प्रौद्योगिकी का समावेश

- उपभोक्ताओं को बेहतर सेवा देने व कार्य प्रणाली का पारदर्शी व प्रमाणिक वेबसाइट पर ऑन लाईन डेटा उपलब्ध कराने व समस्याओं का त्वरित निदान करने एवं उपभोक्ताओं के संतुष्टि स्तर को बढ़ाने के लिए सूचना प्रौद्योगिकी का समावेश करने के लिए केन्द्र सरकार की आर-एपीडीआरपी योजना के अन्तर्गत राजस्थान ने पहल करते हुए भारत सरकार से इस योजना की स्वीकृति प्राप्त कर ली है।
- इस योजना में कुल 529 करोड़ रुपये व्यय होंगे। इस योजना में 30000 से अधिक आबादी वाले 87 कस्बो, नगरो में योजना को लागू करने का प्रावधान है जबकि राजस्थान में अनूठा कदम उठाते हुए इसे सभी ग्रामीण क्षेत्रों में भी समान रूप से लागू करने की व्यवस्था की है जिस पर 233 करोड़ रुपये राज्य सरकार द्वारा वहन किया जायेगा।
- इस योजना से ऊर्जा का सही व स्वचालित अंकेक्षण के साथ अच्छी वोल्टेज व कृषि को 8 घंटे सप्लाई की प्रत्येक स्तर पर स्वतः निगरानी हो सकेगी। इस योजना के पूर्ण होने के बाद ग्राम पंचायत स्तर पर विद्युत व्यवस्था की पूर्ण जानकारी उपलब्ध होगी व वितरण तंत्र के प्रबन्धन में उनकी सहभागिता को भी प्रोत्साहन दिया जा सकेगा।
- राज्य सरकार की ग्राम पंचायत विद्युत वितरण योजना और सूचना प्रौद्योगिकी योजना के सम्मिलित प्रयास से ग्रामीण क्षेत्रों में रहने वाले उपभोक्ताओं को भी अपने समीपस्थ 33 के वी ग्रिड सब स्टेशन पर सभी आवश्यक सुविधाएँ सहायक अभियंता कार्यालय की तरह ही प्राप्त हो सकेगी, जैसे नए कनेक्शन के लिए आवेदन, बिजली के बिलो व बिजली की आपूर्ति में व्यवधान एवं अन्य समस्याओं का समाधान आदि प्राप्त हो सकेगा और उन्हें दूरी पर स्थित सहायक अभियंता के कार्यालय तक नहीं जाना पड़ेगा।
- इस योजना का कार्य मैसर्स एच.सी.एल. इन्फो सिस्टम को 30 सितम्बर 2009 को दे दिया गया है। यह योजना 3 साल में पूरी होगी।
  - 30 सितम्बर, 2010 तक पायलट क्षेत्र प्रत्येक वितरण निगम का एक वृत्त क्षेत्र में जी.आई.एस. सॉफ्टवेयर व हार्डवेयर की स्थापना व कनेक्टिविटी स्थापित करनी थी, परन्तु इस कार्य में अभी 9 महिने का समय ओर लगने की संभावना है। इसके लिए मै. एच.सी.एल. से लगातार सम्पर्क व बैठकें की जा रही है।
- स्कॉडा पार्ट में राजस्थान ने पांच शहरों की योजना पी.एफ.सी. द्वारा स्वीकृत की जा चुकी है, इसमें जयपुर की योजना 52.32 करोड़ रुपये, कोटा की योजना 24.60 करोड़ रुपये, अजमेर की योजना 21.49 करोड़ रुपये, जोधपुर की योजना 32.77 करोड़ रुपये व बीकानेर की योजना 25.93 करोड़ रुपये की है। कुल 157.11 करोड़ रुपये व्यय होंगे। स्काडा स्थापना के लिए मै. कल्की कम्यूनिकेशन, बैंगलोर को सलाहकार नियुक्त किया गया है।
  - इसके लिए आर.एफ.पी. जारी कर दिया गया है व कुछ शर्तों पर पी.एफ.सी. से सहमति प्राप्त होना शेष है।
- ई.आर.पी. हेतु निविदाएं 27.8.2010 को खोली जा चुकी है, जिनका आंकलन किया जा रहा है।
- आरएपीडीआरपी पार्ट-बी में वितरण तंत्र को सुदृढ़ करने की योजना है इससे उपभोक्ताओं को अच्छी वोल्टेज की गुणवत्तापूर्ण बिजली उपलब्ध हो पायेगी। केन्द्र ने 15 प्रतिशत से ज्यादा विद्युत छीजत वाले 82 शहरों की 1462 करोड़ रुपये की योजनाएँ स्वीकृत की है।
  - स्टीयरिंग कमेटी के निर्णय अनुसार स्केडा टाउन का कार्य टर्न-की आधार पर व अन्य टाउन्स/निकायों का कार्य सी.एल.आर.सी. पर किया जावेगा। इसके लिए वृत्त अधिकारियों को कार्य कराने हेतु आदेश दे दिये गये हैं व पदार्थ प्रबंधन शाखा को आवश्यक सामान उपलब्ध कराने हेतु विवरण भेज दिये गये हैं।

## Implementation of Restructured APDRP

R-APDRP is GoI's initiative with focus on establishment of base line data and fixation of accountability, and reduction of AT&C losses through strengthening & up-gradation of Sub-Transmission and Distribution network and adoption of Information Technology during XI Plan

### (a) COVERAGE OF SCHEME

Urban areas—towns and cities with population of more than 30,000 are covered for implementation. Projects under the scheme shall be taken up in Two Parts

**Part-A:** will cover projects for establishment of baseline data and IT applications for energy accounting / auditing & consumer services. Initially 100% funds for the approved projects shall be provided in the form of loan from GOI. The loan along with the interest shall be converted into a grant once the establishment of the required system is achieved and verified by an independent agency appointed by Ministry of Power through Nodal Agency.

### Scope:

The main focus of the Part –A programme is actual demonstrable performance in the sustained loss reduction, establishment of reliable and automate system for sustained collection of accurate baseline data and adoption of Information Technology I the area of energy account. Under this scheme the following projects/ modules will be implemented

- a) Meter Data Acquisition
- b) Energy Audit
- c) New connection
- d) Disconnection & Dismantling
- e) GIS Based Consumer Indexing, Asset Mapping
- f) GIS Based integrated network analysis module
- g) Centralised Customer Care Services
- h) Management Information System
- i) Web Self Services
- j) Identity and Access Management System
- k) System Security Requirement
- l) Metering
- m) Billing
- n) Collections
- o) Asset Management
- p) Maintenance Management

### R- APDRP IN RAJASTHAN

In Rajasthan total 87 towns have been identified which are having population 30000 or more, for which detailed project reports were sanctioned on 20-02-09 by Ministry of Power Govt. of India. The total cost of the scheme for these 87 towns is Rs 459

Crores out of which Rs 316 crores are eligible for grant and Rs 143 crores are to be spent by state utilities for creation of basic infrastructure and the recurring maintenance and network charges. The schemes of Rajasthan were sanctioned on 20.02.2009 as under:

Discom	Scheme Cost in Cr. Rs.	Discom Cost in Cr. Rs	Total cost in Cr. Rs
Jaipur	163.52	60.02	223.54
Ajmer	52.03	36.28	88.31
Jodhpur	100.37	47.10	147.48
Total	315.93	143.4	459.35

### Coverage of Rajasthan Discoms under R-APDRP

Discom	No. of towns covered	No. of sub Division	No. of Consumers Covered in Lacs	No. Of Consumers in Discom in Lacs
Ajmer Discom	29	50	6.01	25.08
Jaipur Discom	27	81	12.27	26.2
Jodhpur Discom	31	54	6.61	22.02
Total	87	185	24.89	73.3

Under this scheme a State Level Data center will be established at Jaipur and a Disaster Recovery center at Jodhpur will be established with the cost implication of Rs 95 Crores. The remaining amount will be spent for total computerization of all field and accounts offices and establishment of Discom level Customer Care Center that will be installed at Jaipur, Ajmer & Jodhpur. All the Sub-Division, Division, Circle and Corporate offices of the Discoms will be connected through State data Center with lease line connectivity in the event of any failure of Data center the Disaster Recovery center will start the work automatically thus maintaining the continuity of the work.

The state has to implement the projects covered under the scheme within 3 years otherwise grant will be converted into loan.

#### (b) PROGRESS SO FAR

The Discoms of Rajasthan has already taken up the steps to implement the scheme within stipulated period.

1. Discoms have created a common IT cell headed by Superintending Engineer (IT) of Jaipur Discom comprising One XEN from each Discom and other qualified Engineers having domain expertise and IT knowledge.
2. In order to implement the project on fast track the tender deciding committee chaired by the Chairman Discoms and MDs of other 2 Discoms has been constituted
3. For better understanding of Business process and timely execution of the scheme to avail the grant a core committee for implementation that comprises O&M , Accounts & IT persons has been framed Similarly at Discom

level one Steering committee has been constituted that will take the monthly review of the projects

4. M/s Infosys Ltd., the leading IT Company of India have been appointed IT consultant on 1.4.09 through bidding process laid by Ministry of Power at the cost of Rs. 1.8 Crs for four years services.
- 5 M/s HCLI has been appointed as the implementing agency .
6. In order to have identical system in entire state it has been decided to implement the scheme in the entire state whether covered under RAPDRP or not. The expenditure incurred on the Non R-APDRP area will be borne by the state Discoms
7. The implementation work is in progress. Chomu, Nasirabad and Pipad have been selected as the three fast track towns .

### **Part A-SCADA**

As per the guidelines issued from MOP the scheme of SCADA will be implemented in the towns having population more than 4 Lakhs & annual input energy of the order of 350 MUs. Accordingly the following schemes were sanctioned on 31.3.10 by PFC. The project is to be completed by 31.3.13.

Name of SCADA city / Discom	Total DPR cost Rs. In Lakhs
Jaipur ( Jaipur Discom)	5232
Kota ( Jaipur Discom)	2460
Total Jaipur Discom,	7692
Bikaner ( Jodhpur Discom)	2593
Jodhpur ( Jodhpur Discom)	3277
Total Jodhpur Discom	5880
Ajmer ( Ajmer Discom)	2149
Total	15711

M/s Kalki Tec has been appointed as SCADA Consultant in Feb'10.

Award of contract has been placed upon M/s Dongfang

Discoms	Total Price in Rs.
Price for Jaipur Discom	460,715,510
Price for Jodhpur Discom	370,974,766
Price for Ajmer Discom	116,987,301
GRAND TOTAL (Indian Rupees)	948,677,577

**Part-B** will cover System renovation, modernization, improvement, strengthening, and augmentation of 11 kV & 33 kV network. Initially up-to 25% funds for the projects shall be provided as loan from GOI . The balance funds for Part B shall be raised from Financial Institutions namely PFC / REC / Multi layer institution or own resources.

The following schemes have been sanctioned so far.

<b>Discom</b>	<b>Scheme cost</b>	<b>No. Of towns covered under PFC scheme</b>
Ajmer Discom	Rs. 391.09 Crs	□ □ ज्ञ Jaipur Discom
Jaipur Discom	Rs. 465.23 Crs.	22
Jodhpur Discom	Rs. 684.17 Crs	31
<b>Total</b>	<b>Rs. 1540.49 Crs.</b>	<b>82</b>

STATUS: -

- (i) For Kota, Bikaner & Jodhpur towns the tenders have been called on Turnkey basis for remaining towns the execution will be on CLRC basis by the respective SE(O&M).

### (c) BENEFITS ENVISAGED

After implementation of the projects the entire working of the Discoms' sub-divisions offices will be automated and become paperless. Moreover Discoms will be able to sustain the Loss levels achieved after implementation of Feeder Renovation Programme. The overall stress to implement the scheme is that to make the working customer centric. The overall benefits that will be achieved are:-

1. Increase consumer satisfaction
2. Transparency in overall working of the Discoms and to make the accountability of Discoms' officer toward general public
3. Reduce outages & interruptions, thus to ensure regular supply to consumers
4. Compilation of a comprehensive data base of consumers, assets, network etc., thus redresses of Consumer complaint immediately
5. Identification of T&D Losses at feeder level and DT level.
6. Monitoring the substation and Distribution Transformers
7. Reduction of AT&C losses
8. Bring about Commercial viability

### List of towns covered in R-APDRP

S.No.	JAIPUR DISCOM	AJMER DISCOM	JODHPUR DISCOM
1	Alwar UA	Ajmer	Abu - Road
2	Baran (M)	Banswara	Balotra
3	Bari	Beawar	Barmer
4	Bayana (M)	Bhilwara	Bhadra
5	Bharatpur UA	Chirawa	Bhinmal
6	Bhawani Mandi (M)	Chittorgarh	Bidasar
7	Bhiwadi (CT)	Didwana	Bikaner
8	Bundi (M)	Dungarpur	Bilara
9	Chomu (M)	Fatehpur	Churu
10	Dausa (M)	Jhunjhunu	Dungargarh
11	Deeg (M)	Kekri	Ganga Nagar
12	Dhaulpur UA	Khetri	Hanuman Garh
13	Gangapur City UA	Kishangarh	Jaisalmer
14	Hindaun (M)	Kuchaman City	Jalore
15	Jaipur (M Corp.)	Laxmangarh	Jodhpur
16	Jhalawar (M)	Makrana	Ladnau
17	Jhalrapatan (M)	Merta City	Nohar
18	Kaman (M)	Nagaur	Nokha
19	Karauli (M)	Nasirabad	Pali
20	Khairthal (M)	Nathdwara	Phalodi
21	Kota UA	Nawalgarh	Pili Banga
22	Kotputli	Nimbahera	Pipar City
23	Lakheri	Pilani	Rajgarh
24	Newai	Pratapgarh	Ratangarh
25	Ramganj Mandi	Rajsamand-Kankroli	Sangariya
26	Sawai Madhopur UA	Rawatbhata	Sardar Sahar
27	Tonk (M C)	Sagwara	Sirohi
28		Sikar	Sojat City
29		Udaipur	Sujangarh
30			Sumerpur
31			Suratgarh