

## R-APDRP

### Introduction

The Govt. of India has proposed to continue R-APDRP during the XI Plan with revised terms and conditions as a Central Sector Scheme. The focus of the programme shall be on actual, demonstrable performance in terms of sustained loss reduction. Establishment of reliable and automated systems for sustained collection of accurate base line data, and the adoption of Information Technology in the areas of energy accounting will be essential before taking up the regular distribution strengthening projects.

### Programme Coverage

It is proposed to cover urban areas - towns and cities with population of more than 30,000 (10,000 in case of special category states). In addition, in certain high-load density rural areas with significant loads, works of separation of agricultural feeders from domestic and industrial ones, and of High Voltage Distribution System (11kV) will also be taken up.

Further, towns / areas for which projects have been sanctioned in X Plan R-APDRP shall be considered for the XI Plan only after either completion or short closure of the earlier sanctioned projects.

### Proposed Scheme

Projects under the scheme 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 activities to be covered under each part are as follows:

#### Part - A:

Preparation of Base-line data for the project area covering Consumer Indexing, GIS Mapping, Metering of Distribution Transformers and Feeders, and Automatic Data Logging for all Distribution Transformers and Feeders and SCADA / DMS system (only in the project area having more than 4 lacs population and annual input energy of the order of 350 MU). It would include Asset mapping of the entire distribution network at and below the 11kV transformers and include the Distribution Transformers and Feeders, Low Tension lines, poles and other distribution network equipment. It will also include adoption of IT applications for meter reading, billing & collection; energy accounting & auditing; MIS; redressal of consumer grievances; establishment of IT enabled consumer service centres etc. The base line data and required system shall be verified by an independent agency appointed by the Ministry of Power. The list of works is only indicative.

#### Part - B:

Renovation, modernization and strengthening of 11 kV level Substations, Transformers/Transformer Centers, Re-conductoring of lines at 11kV level and below, Load Bifurcation, feeder separation, Load Balancing, HVDS (11kV), Aerial Bunched Conductoring in dense areas, replacement of electromagnetic energy meters with tamper proof electronics meters, installation of capacitor banks and mobile service centres etc. In exceptional cases, where sub-transmission system is weak, strengthening at 33 kV or 66 kV levels may also be considered.

### Eligibility Criteria for R-APDRP assistance

The States / Utilities will be required to:

- 1). Constitute the State Electricity Regulatory Commission
- 2). Achieve the following target of AT&C loss reduction at utility level:
  - a). Utilities having AT&C loss above 30%: Reduction by 3% per year
  - b). Utilities having AT&C loss below 30%: Reduction by 1.5% per year
- 3). commit a time frame for introduction of measures for better accountability at all levels in the project area
- 4). submit previous year's AT&C loss figures of identified project area as verified by an independent agency appointed by Ministry of Power (MoP) by 30th June; the independent agency would verify that:
  - a). All input points are identified and metered with downloadable meters for energy inflow accounting in scheme area
  - b). All outgoing feeders are to be metered in substation with downloadable meters
  - c). Scheme area should be ring fenced i.e. export and import meters for energy accounting shall be ensured besides segregating the rural load of the scheme area by ring fencing if not on separate feeder.
  - d). The above shall provide the input energy and corresponding cash collected for calculating AT&C losses. The same shall be carried out for at least for three billing cycles and got verified by the independent agency. This loss level will be the baseline for considering conversion of loan into grant for Part B projects
- 5). Devise a suitable incentive scheme for staff linking to achievements of 15% AT&C loss in the project area.

### Funding Mechanism

- 1). GoI will provide 100% Loan for part A of the R-APDRP schemes which shall include projects for establishing Base Line data and IT applications for energy accounting/ auditing and IT based consumer services etc.
- 2). GoI will provide up to 25% (90% for special category States) Loan for Part B of the R-APDRP schemes which shall include regular distribution strengthening projects.
- 3). The entire loan from GoI will be routed through PFC/REC (FIs) for the respective schemes funded by them.
- 4). The counterpart funding will be done by PFC/REC (FIs) as per its prevailing policy.
- 5). PFC / REC will be the prime lender for funding these schemes. In case of default by the utility the commercial loan of PFC / REC will be recovered first (being the primary Lender) before that of any other lender for funding such schemes.

### Conversion of GoI Loan to Grant:

- 1). The entire amount of GoI loan (100%) for part A of the project shall be converted into grant after establishment of the required Base-Line data system within a stipulated time frame and duly verified by TPIEA.
- 2). Up to 50% (90% for special category States) loan for Part-B projects shall be converted into grant in five equal tranches on achieving 15% AT&C loss in the project area duly verified by TPIEA on a sustainable basis for a period of five years.
- 3). If the utility fails to achieve or sustain the 15% AT&C loss target in a particular year, that year's tranche of conversion of loan to grant will be reduced in proportion to the shortfall in achieving 15% AT&C loss target from the starting AT&C loss figure.

