No. 14/04/2008-APDRP
Government of India
Ministry of Power
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Shram Shakti Bhavan, Rafi Marg,
New Delhi, Dated: December 22nd, 2008

OFFICE MEMORANDUM

Subject: Guidelines for the Re-structured Accelerated Power Development and Reforms Programme (APDRP) during XI Plan
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The Government has approved as a **Central Sector scheme**, the continuation of the Accelerated Power Development and Reforms Programme (APDRP) during the XI Five Year Plan with revised terms and conditions.

2.0 **Scope of the Programme**

2.1 The focus of the programme shall be the 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 shall be necessary pre-conditions before sanctioning any regular distribution strengthening project. The pre-conditions will enable objective evaluation of the performance of utilities before and after implementation of the programme, and will enforce internal accountability leading to better performance.

2.2 The project area coverage will be urban areas – towns and cities with a population of more than 30,000. The population limit will be 10,000 in the case of Special Category States: All North East States, Sikkim, Uttarakhand, Himachal Pradesh and J&K. 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.

2.3 Towns and areas for which projects had been sanctioned in the X Plan APDRP shall be eligible for consideration under the XI Plan either after completion or short closure of the earlier sanctioned projects.

2.4 Projects under the present 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 and IT based consumer service centers. 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 project areas having a population over 4 lacs and annual input energy of 350 MU). It would include Asset Mapping of the entire distribution network at and below the level of 11Kv transformers and shall 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 and auditing; MIS; redressal of consumer grievances; establishment of IT enabled consumer service centers etc. The base line data and required system shall be verified by an independent agency appointed by the Ministry of Power.

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 electronic meters, installation of capacitor banks and mobile service centers etc. In exceptional cases, where the sub-transmission system is weak, strengthening at 33 kV or 66 kV levels may also be considered.

3.0 Nodal Agency

The Power Finance Corporation (PFC) would be the 'Nodal Agency' for the operationalisation and implementation of the APDRP programme, under the overall guidance of the Ministry of Power (MoP). PFC will act as a single window service under APDRP and will coordinate with the main stakeholders involved such as MoP, APDRP Steering Committee, Central Electricity Authority (CEA), Financial Institutions, utilities and various Consultants. PFC would be expected to take the initiative for speedy and timely completion of projects and thus assist the Utilities in achieving loss reduction targets and other parameters of the scheme.

4.0 The modalities of formulating/ implementing projects under the programme are as under:

a) **Project Formulation:** The Utilities shall prepare Detailed Project Reports (DPRs) in two Parts (i.e. Part-A & Part-B) for each of the project areas and while forwarding the DPRs to the Nodal Agency indicate the order of priority of the projects. Utilities may appoint IT Consultants through bidding from an open bidding process from the panel of IT Consultants prepared by the Nodal Agency for preparing DPRs of Part-A projects. IT consultants shall be empanelled by the Nodal Agency / MoP after observing codal formalities. Utilities may also prepare DPRs for Part-A on their own in case they feel that they have the skill and expertise to do so. Hiring charges of the IT Consultant may be included in the project cost of Part-A only if an IT Consultant is appointed from the panel prepared by the Nodal Agency and same is appointed through competitive bidding. DPRs for Part-A shall be submitted by utilities along with an undertaking indicating that the DPR is duly vetted either by the IT Consultant so appointed or else by the utility itself. These DPRs shall be submitted to PFC, the Nodal Agency. These DPRs will be validated and appraised techno-commercially by PFC and will then be submitted to the APDRP Steering Committee for approval. Further guidelines as required for formulation of projects would be issued by Ministry of Power from time to time.

b) **Implementation**: SEBs / State Utilities shall implement projects sanctioned under this programme on a turnkey basis by appointing the **IT implementing agency** through a bidding process only from the Panel of **IT Implementing Agencies** notified by the Nodal Agency to ensure quality and expeditious implementation. IT implementing agencies shall be empanelled by the Nodal Agency / MoP after observing codal formalities. Further guidelines as required for implementation of projects would be issued by Ministry of Power from time to time.

c) **Quadripartite Agreement**: A Quadripartite Agreement will be entered into between SEBs / Utilities, GoI, PFC and the State Government to implement the re-structured APDRP. Signing of Quadripartite Agreement is a prerequisite for release of funds under the re-structured APDRP. The Ministry of Power / PFC will monitor implementation of the precedent conditions agreed to in the Quadripartite Agreement before releasing funds. If considered necessary, Ministry of Power may impose such conditionalities as it deems fit for the implementation of re-structured APDRP from time to time.

5.0 Project Funding Mechanism

5.1 **Part-A**: Initially 100% funds for the approved projects shall be provided in the form of a loan from the Government of India on such terms as decided by the Ministry of Finance. The applicable rate of interest and other Terms and Conditions will be as notified by GoI from time to time. The loan along with interest thereon shall be converted into a grant once the establishment of the required system is achieved and verified by an independent agency appointed by the Ministry of Power (MoP) through the Nodal Agency. No conversion to grant will be made in case projects are not completed within 3 years from the date of sanctioning of the project. In such cases the concerned utility will have to bear the full loan and interest repayment. The project will be deemed to be completed on the establishment of the required system duly verified by an independent agency appointed by the Ministry of Power (MoP) through the Nodal Agency.

5.2 **Part-B**: Initially upto 25% funds for the projects shall be provided as a loan from the Government of India on such terms decided by the Ministry of Finance. The applicable rate of interest and other Terms and Conditions will be as notified by GoI from time to time. The balance funds for Part B projects shall be raised from Financial Institutions (FIs), namely PFC/REC / multi-lateral institutions and/ or own resources. The loan from the FIs will be governed by the respective terms of the FIs. For Special Category States (all North-Eastern States, Sikkim, Uttarakhand, Himachal Pradesh and Jammu & Kashmir), GOI loan for Part B projects will be upto 90%. All other conditions / methodology applicable to non-special category states shall also be applicable to the special category states. The project-wise requirement of Gross Budgetary Support (GBS) will be decided by the Steering Committee. If the Distribution Utilities achieve the target of 15% AT&C loss on a sustained basis for a period of 5 years in the project area and the project is completed within the time schedule fixed by the Steering Committee, which shall in no case exceed five years from the date of project approval, upto 50% (90% for Special Category States) loan against Part-B projects will be convertible into a grant in equal tranches, every year for 5 years starting one year after the year in which the base-line data system (Part A) of project area concerned is established and verified by the independent agency appointed by MoP through the Nodal Agency. 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% Aggregate Technical & Commercial (AT&C) loss target from the starting base-line assessed figure. The loan from GOI shall be the first converted into grant. Loans from FIs shall be converted into grant only after the conversion of full GOI loan into grant. Whenever the loan from GoI / FIs will be converted into grant, interest and other charges paid on the converted amount will also be treated as grant and reimbursed to the Utility. For the loan and interest which could not be converted into grant on account of not meeting the conditions of conversion, the utility / state will have to bear the balance burden of loan and interest repayment. Illustration is given through a typical example at **Annex**.

5.3 The sanction process and other formalities for execution of Part-A and Part-B projects can be taken up simultaneously except Part-B activities are likely to start 3-6 months after the start of Part-A for making arrangements of ring fencing of the project area and verification of the starting figure of AT&C loss of the project area by an independent agency appointed by the MoP through the Nodal Agency with three billing cycle data. This may not be necessary where ring fencing of the project area has already been done by the State Utilities except for the time required for verification of the starting figure of AT&C loss of the project area. This would help the utilities to reduce the over all project execution cycle.

5.4 The following table clarifies the funding modalities.

Category of States	**% of Project Cost as <u>loan</u> through GBS from GOI**	**% of Project Cost as <u>loan</u> from PFC/REC/ Own/ Other Sources**	**Remarks**
Part-A Projects			
All States	100	-	Entire loan shall be converted into grant on completion of project duly verified by Independent Agency appointed by MoP / Nodal Agency
Part-B Projects			
Non-special Category	Upto 25	Upto 75	Upto 50% (90% for special category states) loan shall be converted into grant in five

States			annual tranches on achieving 15% AT&C loss in the project area. Illustration of loan conversion through Typical example is indicated at **Annex.**
Special Category States	Upto 90	Upto 10	

6.0 **Release/ Disbursement of funds**

The release / disbursement of funds and detailed terms and condition governing conversion of loan into grant shall be notified separately.

7.0 **Third party evaluation**

7.1 Ministry of Power shall appoint Third Party Independent Agencies through the Nodal Agency. The Third Party Independent Evaluating Agencies (TPIEAs) shall be appointed for following verification:

(a) **Base (starting) figure of AT&C loss of the project area**: The state power utility / distribution Company shall ring fence each identified project area at the beginning of the programme. Three billing cycle data of energy inflow and outflow and corresponding revenue collected for the project area shall be furnished to the Independent Agency for verifying the base (starting) figure of AT&C loss of the project area. Part B projects will be taken up after verification of initial AT&C loss by Ministry of Power (MoP) through nodal agency.

(b) The establishment of Base line Data System (i.e. completion of Part-A projects).

(c) Yearly AT&C loss figures of project areas and State Power Utilities / Distribution Companies.

8.0 **Incentive Scheme for Utility Staff**

8.1 The scheme also envisages the provision of incentives for the utility staff in towns where AT&C loss levels are brought below 15%. Each distribution company shall be required to implement an incentive programme for utility employees of the specific project area. Details of the incentive scheme and the milestones/achievements that trigger incentive payments shall be agreed to in the project proposals presented by each utility. A maximum amount equivalent to 2% of the annual grant converted for Part-B project will be allocated for this purpose additionally. The utility is expected to match these funds and disburse the total amount among its employees according to a suitably devised incentive scheme. A model scheme will be formulated by the Ministry of Power, on basis of which each utility must submit a duly approved incentive scheme for approval of the Steering Committee in the MoP prior to seeking disbursements under Part-B.

8.2 State governments and distribution companies will work with the concerned regulator to ensure that a part of the financial benefits arising out of the AT&C loss reduction are also passed on to the consumers of the project area.

9.0 Eligibility Criteria for APDRP assistance

9.1 The States / Utilities will be required to:

a) Constitute the State Electricity Regulatory Commission.

b) Achieve the following target of AT&C loss reduction at the entire utility level every year starting one year after the year in which first project of Part-A is completed :

   Utilities having AT&C loss above 30%: Reduction by 3% per year

   Utilities having AT&C loss below 30%: Reduction by 1.5% per year

c) commit a time frame for introduction of measures for better accountability at all levels in the project area;

d) submit previous year's (as of 31st March) AT&C loss figures of identified project area as verified by an independent agency appointed by Ministry of Power (MoP) / Nodal Agency by 30th June annually;

e) the TPIEA would initially verify the input energy and corresponding cash collected for calculating AT&C losses. The same shall be carried out at least for three billing cycles and got verified by the independent agency. This initial loss level will be the **Baseline** for considering conversion of loan into grant for Part B projects. The following are prerequisite to compute initial loss level and start Part-B schemes:

   i. All input points are identified and metered with downloadable meters for energy inflow accounting in scheme area.

   ii. All outgoing feeders are to be metered in substation with downloadable meters.

   iii. Scheme area should be ring fenced i.e. export and import meters for energy accounting shall be ensured.

   iv. Arrangement for measuring total energy flow in the rural load portion of the project area by ring fencing, if the rural load feeder is not segregated.

f) devise a suitable incentive scheme for staff linking to achievements of 15% AT&C loss in the project area.

10.0 Approval and Monitoring Mechanism

10.1 A Steering Committee under Secretary (Power) comprising of representatives of Ministry of Finance, Planning Commission, Central Electricity Authority, Power Finance Corporation, Rural Electrification Corporation, selected State Governments (on one year rotation basis) and of Ministry of Power will be continued as earlier. The Steering Committee will meet on 1st

Monday of every month or Tuesday (if Monday is a holiday) for first six months of its constitution and later as and when required. The Steering Committee will –

(a) Sanction projects, including modification or revision of estimates; Monitor and review the implementation of the Scheme;
(b) Approve panel of IT Consultant and IT Implementation Agencies
(c) Approve the guidelines for operationalisation of various components of the scheme including mechanism for payment of fees to nodal agency;
(d) Approve TPIE Agencies for verification and validation of base-line data systems, for verifying the fulfilment of programme conditions by utilities;
(e) Approve conversion of loan into grant upon fulfilment of the necessary conditions;

10.2 **Distribution Reforms Committee (DRC) at the State level** under the Chairmanship of the Chief Secretary/Principal Secretary/Secretary Power/Energy constituted by the State will continue to monitor the Scheme at the State level. These DRCs have been setup under the Memorandum of Agreement signed by the States for implementation of the X plan APDRP. DRC will –

a) Recommend the project proposals of the distribution companies to the Ministry of Power after ensuring that all the required formalities have been complied with;
b) Monitor the compliance to conditionalities;
c) Monitor the achievement of milestones and targets under the Scheme.

11.0 APDRP Assistance to Private Distribution Companies

The assistance under APDRP would not be applicable for private distribution companies. The participation of the private utilities in APDRP will be considered after a period of two years from 31.07.2008.

12.0 Implementation of the re-structured APDRP shall be through web interface. The design, hoisting and maintenance during the full implementation cycle of the scheme of the web portal shall be the responsibility of the Nodal Agency.

13.0 General terms and conditions for utilization of funds

a) The funds under the programme will be provided to the State Power Utility/ Distribution Company through PFC, the nodal agency. Budget provision for the funds shall be made annually.

b) State Power Utility / Distribution Company receiving APDRP assistance will have to open a separate account/ sub-account head immediately, for separate accounting classification, both on the receipt and expenditure side for enabling proper audit certification including escrow account in the bank.

c) The reduction of T&D losses as part of overall AT&C losses would also enable the Utilities to claim carbon credits for avoiding power generation (reducing CO_2 emission) under CDM mechanism subject to necessary approvals. The state utilities will be encouraged to take advantage of CDM benefits for reducing the cost of the scheme and making it financially viable. A cell for facilitating the same shall be created in the Nodal Agency.

d) The loan under the programme through GBS from GOI shall be subject to the Terms and Conditions laid down by the Ministry of Finance/ GoI at the time of release.

e) Funds provided to the State Power Utility / Distribution Company under APDRP cannot be diverted to any other scheme or used for any other purpose.

f) The State Governments/ State Power Utilities would be required to submit to PFC/MoP monthly progress report in respect of progress of execution of project, fund utilization, etc.

14. These guidelines are issued with the approval of Steering Committee accorded in its meeting held on 18.12.2008.

(KAPIL MOHAN)
Director (Distribution)

To
Energy/Power Secretaries of all the State Governments
Chairmen of State Electricity Boards/ CMDs of State Power Utilities

Copy forwarded to:

1. Cabinet Secretariat (Shri K.L.Sharma, Director), Rashtrapati Bhavan, New Delhi.
2. Ministry of Finance, Department of Expenditure (Plan Finance Division-II), North Block, New Delhi.
3. Ministry of Finance, Department of Economic Affairs, North Block, New Delhi.
4. Planning Commission, Yojana Bhavan, New Delhi.
5. Chairperson, Central Electricity Authority, R.K. Puram, New Delhi.
6. Finance/Budget Section, Ministry of Power, New Delhi.
7. Controller of Accounts, Ministry of Power, New Delhi.
8. Principal Director of Audit, Economic & Services Ministries, AGCR Building, I.P. Estate, New Delhi.
9. C&MD, Power Finance Corporation, New Delhi.
10. C&MD, Rural Electrification Corporation, New Delhi.
11. 12^{th} Finance Commission, Ministry of Finance, Jawahar Vyapar Bhavan, New Delhi.
12. Department of Programme Implementation, Sardar Patel Bhavan, New Delhi.

Copy to:
PS to Minister of Power/ PS to Minister of State for Power
PS to Secretary (Power) / Sr PPS to AS(AK) / PPS to AS(GBP)
PS to Joint Secretary (Dist)/ PS to JS&FA

ANNEX

Typical Example

Take the example of a distribution utility from a non-special category State where starting AT&C loss figure of a particular ring fenced project area is 60% at the start of the programme duly verified by the MoP appointed independent agency with the three billing data of energy inflow & outflow and corresponding revenue collection. If the Part A is established and verified by the independent agency appointed by MoP in the year 2009-10 and distribution utility achieves and sustains the 15% AT&C loss level in the project area for a period of 5 years after the period of one year i.e. 2009-10, one fifth of the 50% loan shall be converted into grant each year after the year 2010-11 onwards. However, if this distribution utility could only achieve AT&C loss figures of 30%, 40%, 30%, 15% and 20% in 1st, 2nd 3rd, 4th and 5th year respectively of the period in question, the year wise loan conversion into grant shall be as follows:

20010-11 **1st year:** (60-30)/(60-15) i.e. 2/3 of Annual tranche (1/5 of 50% loan i.e. 10% of project cost) shall be converted into grant.

2011-12 **2nd year:** (60-40)/(60-15) i.e. 4/9 of Annual tranche (1/5 of 50% loan i.e. 10% of project cost) shall be converted into grant.

2012-13 **3rd year:** (60-30)/(60-15) i.e. 2/3 of Annual tranche (1/5 of 50% loan i.e. 10% of project cost) shall be converted into grant.

2013-14 **4th year:** (60-15)/(60-15) i.e. full Annual tranche (1/5 of 50% loan i.e. 10% of project cost) shall be converted into grant.

2014-15 **5th year:** (60-20)/(60-15) i.e. 8/9 of Annual tranche (1/5 of 50% loan i.e. 10% of project cost) shall be converted into grant.