

Chapter-I

Introduction

1.1 Access to energy is a basic prerequisite, unavailability or poor supply of which has adverse impact on all aspects of life and livelihood. Thus, Rural Electrification has aptly been identified as a critical programme for rural development by policymakers at regional and national levels.

Rural Electrification is not just about transporting electricity between two points but also about developing the right complementarity and providing electrification which is accessible, available and affordable. The focus on rural electrification and the associated public initiatives have also undergone changes over the years. The initial approach of providing electrification for agriculture in 1990s, gave way to a more holistic approach *i.e.* electricity for each rural household.

The demand of electricity in rural areas is increasing day by day due to increase in the customer base, changes in the lifestyle and consumption patterns which require continuous strengthening and augmentation of the distribution network. Further, inadequate and unreliable availability of power, frequent load shedding and the gap between supply and demand affects power supply to agricultural consumers as well as non-agricultural consumers owing to a common distribution network in rural areas. Supply of electricity through dedicated feeders to agricultural and non-agricultural consumers allows the distribution company to regulate power supply to agricultural consumers as and when needed for effective Demand Side Management (DSM). The separation of feeders helps in flattening of the load curve by shifting the agricultural load to off-peak hours and thus facilitates peak load management. Besides, for sustainable commercial operations of electricity distribution, metering at consumer end and at distribution transformers and feeders is essential to build a mechanism for proper energy accounting and to identify high loss pockets.

State Plan for Rural Electrification

1.2 Pursuant to Rural Electricity Policy of Government of India (GoI) and provisions of the Electricity Act 2003, Government of Rajasthan (GoR) notified (September 2008) Rural Electrification (RE) plan for the State to achieve the national goal of providing access to electricity to all rural households by the year 2009. Thereafter, separate RE plan was not prepared in the State.

RE plan of 2008 envisaged the following:

- strengthening of existing infrastructure;
- providing quality power supply in rural areas which required segregation of agriculture and rural feeders;
- conversion of LT network to High Voltage Distribution System (HVDS); and
- augmentation of transformers *etc.*

Subsequently, under ‘Power for All’ programme, GoR prepared (December 2014) Generation, Transmission and Distribution Plan to be implemented during 2014-19. The Distribution Plan included existing distribution system, schemes under implementation and fund requirement for connecting the un-electrified households/villages. It also proposed schemes including GoI intervention, renewable energy initiatives of GoR at consumer level and action plan of the State for both conventional and renewable energy.

Proposed schemes and fund requirements

1.3 To eliminate the frequent occurrence of shutdowns and in order to reduce the number of load shedding occurrences; feeder and substation improvement programs were proposed to be implemented in the State. In these programmes, the requirement of feeder improvement, three phase supply to villages near to 33/11kV sub-stations, sub-stations improvement programme, additional 33/11kV sub-stations for 24X7 power supply, reduction of Aggregate Technical and Commercial (AT&C) losses *etc.* was assessed. The details of investment plan to meet out these programmes were assessed as under:

Table No. 1.1
Details of Investment Plan of DISCOMs

(₹ in crore)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total	Remarks
State Plan	1513.00	1437.00	1372.00	1549.74	1595.17	7466.91	
Centrally sponsored schemes	885.00	1516.83	1150.00	1103.19	739.00	5394.02	RGGVY ¹ and RAPDRP ²
Other distribution schemes	2532.00	754.23	417.00	372.00	394.94	4470.17	IPDS ³ and DDUGJY ⁴

Source: Rajasthan 24 X 7 Power for all document

Total investment (₹ 7,466.91 crore) envisaged under State Plan provided for sub-transmission & distribution programme (₹ 3,263 crore) and rural electrification works (₹ 4,203.91 crore).

Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

1.4 Ministry of Power, Government of India (MoP, GoI) launched (December 2014) DDUGJY to strengthen the sub-transmission & distribution infrastructure and to ensure reliable and quality power supply in rural areas.

The objectives of the DDUGJY were:

- Separation of agriculture and non-agriculture feeders facilitating judicious rostering of supply to agricultural & non-agricultural consumers in the rural areas;
- Strengthening and augmentation of sub-transmission & distribution (ST&D) infrastructure in rural areas, including metering at distribution transformers, feeders and consumers end; and
- Rural electrification, as per the targets laid down (August 2013) under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY).

1 Rajiv Gandhi Gramin Vidyutikaran Yojana.

2 Restructured Accelerated Power Development and Reforms Programme.

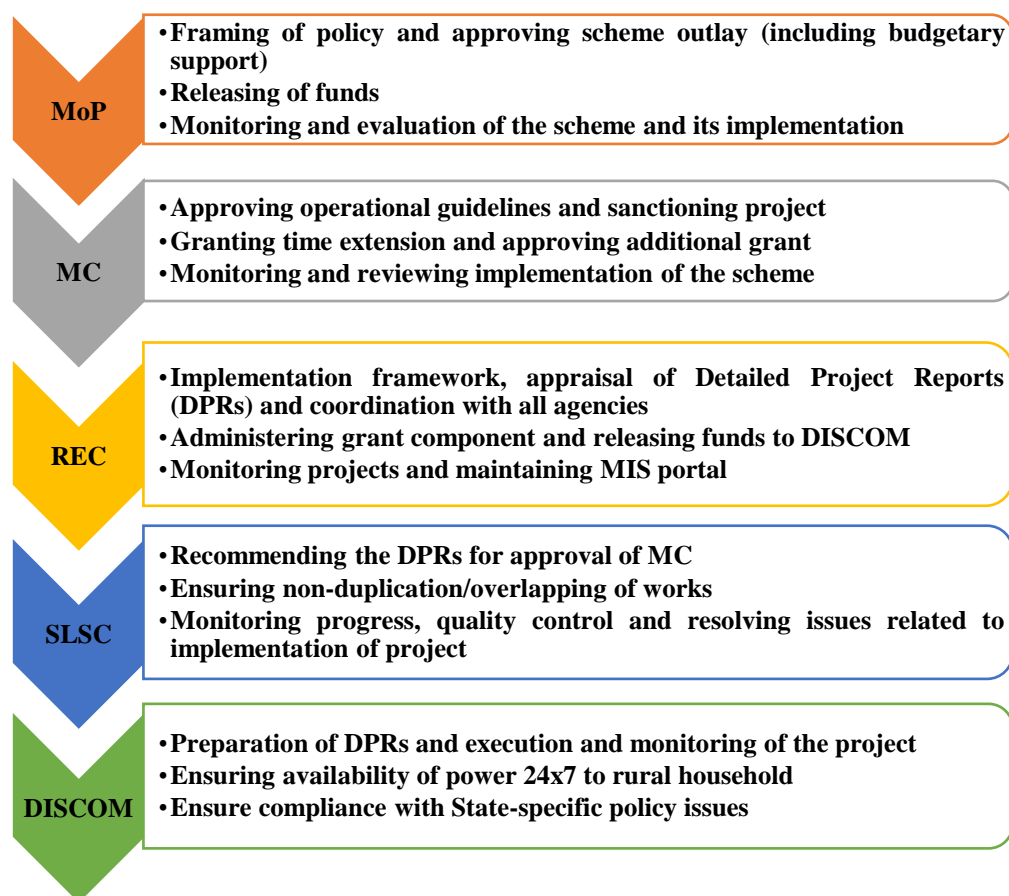
3 Integrated Power Development Scheme.

4 Deendayal Upadhyaya Gram Jyoti Yojana

DDUGJY provided for financial assistance to all Distribution Companies (DISCOMs). Further, DDUGJY was to be implemented through a five-tier system *i.e.* MoP, GoI, Monitoring Committee⁵ (MC), Rural Electrification Corporation Limited (REC) *i.e.* nodal agency for implementing the Scheme, State Level Standing Committee⁶ (SLSC) and concerned DISCOM. The Scheme also provided for a tripartite agreement between REC, the State Government and the utility (DISCOM) and a Project Management Agency (PMA) to be appointed by the DISCOMs. Implementation of the Scheme was to be completed by March 2019. The MoP, GoI, however, extended (August 2019) the Scheme upto March 2020 and further extended (24 July 2020) the Scheme upto March 2021.

Role and Responsibilities of Stakeholders

1.5 Role of the five stakeholders in implementing the Scheme is detailed under:



5 Chaired by Secretary (Power), MoP, GoI and consist of representatives from MoP and other ministries *viz.* Finance, Rural Development, Agriculture, New and Renewable Energy, Central Electricity Authority (CEA) and Planning Commission as members and REC as member secretary and convener.

6 Headed by the Chief Secretary, GoR and consisted of Secretaries of the departments of the GoR *{i.e.* Energy, Urban Development and Housing, Agriculture, Local Self Governance, PHED, Panchayati Raj, Finance (Expenditure) and Forest}, representatives of six electricity companies (RRVPL, RRVUNL, RRECL and three DISCOMs), REC *etc.*

As per provisions of the Scheme, the DISCOMs were required to prioritise strengthening of rural infrastructure works considering specific network requirement of the area and to formulate Detailed Project Reports (DPRs) for coverage under the Scheme. The DPRs so prepared were to be recommended by the SLSC to REC. REC had to appraise and recommend the DPRs to the MC and the same were to be approved by the MC. The MC (constituted in December 2014) was also empowered to approve/amend operational guidelines prepared by REC and to monitor implementation of the Scheme.

Status of rural electrification

1.6 The status of rural electrification in Rajasthan State as on 31 March 2015 is shown in the table below:

Table No. 1.2
DISCOM wise detail of Rural electrification in Rajasthan

Particulars	Jaipur DISCOM		Ajmer DISCOM		Jodhpur DISCOM		Total	
	As per 2011 Census	Total HHs as on 31 March 2015	As per 2011 Census	Total HHs as on 31 March 2015	As per 2011 Census	Total HHs as on 31 March 2015	As per 2011 Census	Total HHs as on 31 March 2015
Total House Holds	4528936	5213675	4244536	4642192	4200329	4829999	12973801	14685866
Rural HH	3232212	3640884	3370121	3689892	3245352	3715817	9847685	11046593
Total Energised HH	2898754	3665789	2729916	3457567	2434662	2859197	8063332	9982553
Rural HH electrified	1948928	2235640	2035998	2649366	1595883	1797310	5580809	6682316
Un-electrified Rural HH	1283284	1405244	1334123	1040526	1649469	1918507	4266876	4364277

Source: Census data of 2011 and DPRs

Note: DISCOMs, while preparing the project wise DPRs, derived the figures of total HHs as on 31 March 2015 by extrapolating the figures of census 2011. The extrapolation was done by reckoning Compound Annual Growth Rate (CAGR) of population from 2001 to 2011.

As per 2011 Census data, there were 98.48 lakh rural households in Rajasthan, of which, 55.81 lakh rural households (56.67 per cent) had access to electricity.

Scope of Audit

1.7 The performance audit covered the implementation of DDUGJY by all the three DISCOMs in the State during the period 2015-20. Audit scrutiny covered detailed review of records relating to formulation and approval of DPRs; award and execution of project works; arrangement and utilisation of funds (including GoI grant); quality of works/material and monitoring of the Scheme maintained at head office of each of the three DISCOMs as well as nine selected Circle offices (i.e. three Circle offices from each DISCOM). The Circle offices/projects were selected for detailed scrutiny by adopting stratified random sampling without replacement (SRSWOR) method. Details relating to sample selection are given in **Annexure-1**. During the Performance Audit, nine⁷ districts (27.27 per cent of the total 33 districts) were test checked. These nine districts were allotted ₹ 1,026.53 crore (36.41 per cent) out of total sanctioned cost of ₹ 2,819.41 crore for the scheme.

7 Bharatpur, Tonk, Bundi, Ajmer, Banswara, Sikar, Barmer, Jalore and Pali.

Audit Objective

- 1.8** The Performance Audit was conducted to assess whether:
- the system for assessing the requirement of infrastructural works and formulation of DPRs was adequate;
 - execution of the projects was economical, efficient and effective;
 - the mechanism for monitoring the execution and quality of executed works was adequate; and
 - the objectives of the Scheme were met efficiently and effectively.

Audit Criteria

- 1.9** The criteria for the audit objectives were drawn from the following sources:
- policy, guidelines, orders, circulars and directions issued by the MoP, GoI, Monitoring Committee and REC for implementing the Scheme;
 - approved DPRs along with records relating to formulation, submission, and approval of DPRs and subsequent revisions of DPRs;
 - tripartite agreements executed with REC and the GoR;
 - the Electricity Act 2003;
 - agenda and minutes of BoD, Corporate Level Purchase Committee (CLPC), DISCOMs Coordination Forum (DCF) and other committees of DISCOMs;
 - records maintained by the Planning Section of each DISCOM;
 - contracts relating to execution of the projects along with relevant records;
 - records relating to monitoring the execution of projects by the Monitoring Committee, SLSC and DISCOM level committees;
 - reports of the third-party inspections (TPIs) of the projects.

Audit Methodology

- 1.10** The methodology adopted for attaining audit objectives with reference to audit criteria consisted of:
- explaining audit objectives, scope of audit and audit criteria to the Government/DISCOMs during Entry conference held on 9 July 2020;
 - scrutiny of records at Head Office of the three DISCOMs and nine selected Circle offices/projects (three Circle offices/projects from each DISCOM);
 - raising audit queries, seeking their replies and interaction with the management of DISCOMs;

- issue (18 March 2021) of factual statement on draft Performance Audit Report to the Government/DISCOMs;
- discussion (27 May 2021) with the Government/DISCOMs' management on the audit findings during the Exit Conference; and
- issue of draft Performance Audit Report to the Government/DISCOMs (June 2021) after incorporating the views/replies (May 2021) of the Government on the audit findings.

Acknowledgement

1.11 Audit acknowledges the cooperation and assistance extended by the Energy Department, DISCOMs and their officials during the conduct of the Performance Audit.

Audit Findings

1.12 The audit findings are broadly covered in following five chapters:

- Project Formulation and Execution;
- Contract Management;
- Monitoring & Quality Assurance Mechanism;
- Funding Mechanism; and
- Beneficiary Survey.

The audit findings highlight the performance of three DISCOMs in implementation of DDUGJY in the State.

These audit findings are based on Audit analysis of works executed in nine selected projects only and there is a possibility of more such cases occurring in the DISCOMs. Therefore, the Government/Management of DISCOMs is expected to review all other cases having possibility of similar deficiencies/irregularities and take corrective action in cases where similar deficiencies/irregularities are found.

The audit findings were communicated to the State Government/DISCOMs in June 2021. Reply of the Government on the draft Performance Audit Report has been received in August 2021 and the same has been considered in the report.