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# STANDING COMMITTEE ON ENERGY (2024-25)

EIGHTEENTH LOK SABHA

#### **MINISTRY OF POWER**

# DEMANDS FOR GRANTS (2024-25)

#### **FIRST REPORT**



## LOK SABHA SECRETARIAT NEW DELHI

December, 2024/ Agrahayana, 1946 (Saka)

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#### **MINISTRY OF POWER**

DEMANDS FOR GRANTS (2024-25)

Presented to Lok Sabha on 10<sup>th</sup> December, 2024

Laid in Rajya Sabha on 10th December, 2024



#### LOK SABHA SECRETARIAT NEW DELHI

December, 2024/Agrahayana, 1946 (Saka)

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## COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2024-25) LOK SABHA

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1.	Shri Ramkumar Suryanarayanan	Joint Secretary	
2.	Shri Kulmohan Singh Arora	Director	
3.	Ms. Deepika	<b>Under Secretary</b>	

#### INTRODUCTION

I, the Chairperson, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this First Report on Demands for Grants (2024-25) of the Ministry of Power.

- 2. The Committee took oral evidence of representatives of the Ministry of Power on 15<sup>th</sup> October, 2024. The Committee wish to express their thanks to representatives of the Ministry and concerned Organizations for appearing before the Committee for evidence and furnishing the information desired by the Committee in connection with the issues relating to the subject.
- 3. The Report was considered and adopted by the Committee at their sitting held on 3<sup>rd</sup> December, 2024.
- 4. The Committee place on record their appreciation of the assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.
- 5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in Part-II of the Report.

New Delhi <u>3<sup>rd</sup> December, 2024</u> 12 Agrahayana, 1946 (Saka) Shrirang Appa Barne Chairperson, Standing Committee on Energy

	LIST OF ABBREVIATIONS
ACS	Average Cost of Supply
ADEETIE	Assistance in Deploying Energy Efficient Technologies in Industries &
	Establishment
APDRP	Accelerated Power Development and Reforms Programme
ARR	Average Revenue Realized
AT&C	Aggregated Transmission and Commercial
AUSC	Advanced Ultra Supercritical
BE	Budgetary Estimate
BEE	Bureau of Energy Efficiency
BESS	Battery Energy Storage System
CAG	Comptroller and Auditor General
CAPEX	Capital Expenditure
CCUS	Carbon Capture, Utilization and Storage
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CFA	Central Financial Assistance
ckt. Kms.	Circuit Kilometers
CPRI	Central Power Research Institute
CPSEs	Central Public Sector Enterprises
CPSUs	Central Public Sector Undertakings
CPWD	Central Public Works Department
CSMRS	Central Soil and Materials Research Station
CSS	Centrally Sponsored Scheme
CTU	Central Transmission Utility
CVPPPL	Chenab Valley Power Project Private Limited
CWC	Central Water Commission
DAJGUA	Dharti Aaba Janjatiya Gram Utkarsh Abhiyan
DDUGJY	Deendayal Upadhyaya Gram Jyoti Yojana
DISCOM	Distribution Company
DoPT	Department of Personnel and Training
DPR	Detailed Project Report
DSM	Demand Side Management
DTE	Domestic Travel Expenses
DVC	Damodar Valley Corporation
EAP	Externally Aided Project
EBR	Extra Budgetary Resources
EC	Energy Conservation
EFC	Expenditure Finance Committee
FTE	Foreign Travel Expenses
FY	Financial Year
GBS	Gross Budgetary Support
GCIL	Grid Controller of India Limited
GEF	Global Environment Facility

GIB	Great Indian Bustard
GoI	Government of India
GSDP	Gross State Domestic Product
GSI	Geological Survey of India
GWh	Gigawatt Hours
HEP	Hydro Electric Project
IEBR	Internal and Extra Budgetary Resources
IPDS	Integrated Power Development Scheme
JV	Ioint Venture
JVVNL	Jaipur Vidyut Vitran Nigam Limited
KGBV	Kasturba Gandhi Balika Vidyalaya
kV	Kilo Volt
MNRE	Ministry of New and Renewable Energy
MoF	Ministry of Finance
MoP	Ministry of Power
MSEDCL	Maharashtra State Electricity Distribution Company Limited
MSME	Micro, Small and Medium Enterprises
MU	Million Unit
MVA	Megavolt Amperes
MW	Mega Watt
MWh	Megawatt Hour
NDMC	New Delhi Municipal Council
NEEPCO	North Eastern Electric Power Corporation Limited
NER	North Eastern Region
NERPSIP	North Eastern Region Power System Improvement Project
NHAI	National Highways Authority of India
NHPC	National Hydro Power Corporation Limited
NMEEE	National Mission for Enhanced Energy Efficiency
NPTI	National Power Training Institute
NSGM	National Smart Grid Mission
NTPC	National Thermal Power Corporation Limited
0&M	Operations and Maintenance
ОТ	Operational Technology
PFC	Power Finance Corporation
PGCIL	Power Grid Corporation of India Limited
PGVCL	Paschim Gujarat Vij Company Limited
PM-JANMAN	Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan
PMDP	Prime Minister Development Package
PMRP	Prime Minister's Reconstruction Plan
PSDF	Power System Development Fund
PVTG	Particularly Vulnerable Tribal Groups
R&D	Research and Development
RDSS	Revamped Distribution Sector Scheme

RE	Revised Estimated
REC	Rural Electrification Corporation
REMC	Renewable Energy Management Centers
RoW	Right of Way
SAUBHAGYA	Pradhan Mantri Sahaj Bijli Har Ghar Yojana
SC	Scheduled Caste
SCADA	Supervisory Control and Data Acquisition
SCSP	Scheduled Caste Sub-Plan
SDA	State Designated Agency
SDMC	South Delhi Municipal Corporation
SECF	State Energy Conservation Fund
SJVN	Satluj Jal Vidyut Nigam Limited
SMEs	Small and Medium Enterprises
SSC	Staff Selection Commission
ST	Scheduled Tribes
TASP	Tribal Area Sub-Plan
THDC	Tehri Hydro Development Corporation
TSA	Treasury Single Account
Twh	Terawatt Hours
UAV	Unmanned Aerial Vehicle
UGVCL	Uttar Gujarat Vij Company Limited
UNDP	United Nations Development Programme
UPSC	Union Public Service Commission
UTs	Union Territories
VGF	Viability Gap Funding

#### PART-I NARRATION ANALYSIS

#### CHAPTER - I INTRODUCTORY

- **1.1** Electricity is a concurrent subject at Entry 38 in List III of the Seventh Schedule of the Constitution of India. As per the Government of India (Allocation of Business) Rules, 1961; the main items of work dealt with by the Ministry of Power, are given below:
  - General Policy in the electric power sector and issues relating to energy policy and coordination thereof. (Details of short, medium and longterm policies in terms of formulation, acceptance, implementation and review of such policies, cutting across sectors, fuels, regions and intracountry and inter-country flows);
  - ii) All matters relating to hydro-electric power (except small/mini/micro hydel projects of and below 25 MW capacity), thermal power and transmission and distribution system network;
  - iii) Research, development and technical assistance relating to hydroelectric and thermal power, transmission system network and distribution systems in the States/UTs;
  - iv) Administration of the Electricity Act, 2003 (36 of 2003), the Energy Conservation Act, 2001 (52 of 2001), the Damodar Valley Corporation Act, 1948 (14 of 1948) and the Bhakra Beas Management Board as provided in the Punjab Reorganization Act, 1966 (31 of 1966);
  - v) All matters relating to Central Electricity Authority, Central Electricity Board and Central Electricity Regulatory Commission;
  - vi) (a) Rural Electrification;
    - (b) Power schemes and issues relating to power supply/development schemes/programmes/decentralized and distributed generation in the States and Union Territories;
  - vii) Matters relating to the following Undertakings/Organizations:
    - (a) The Damodar Valley Corporation;
    - (b) The Bhakra Beas Management Board (except matters relating to irrigation);
    - (c) National Thermal Power Corporation Limited;
    - (d) National Hydro-electric Power Corporation Limited;
    - (e) Rural Electrification Corporation Limited;
    - (f) North Eastern Electric Power Corporation Limited;
    - (g) Power Grid Corporation of India Limited;
    - (h) Power Finance Corporation Limited;
    - (i) Tehri Hydro Development Corporation (THDC India Limited);

- (j) Nathpa Jhakri Power Corporation (SJVN Limited);
- (k) Central Power Research Institute;
- (l) National Power Training Institute;
- (m) Bureau of Energy Efficiency;
- (n) Power Trading Corporation of India Limited;
- (o) Narmada Hydro Development Corporation (Joint Venture).
- viii) All matters concerning energy conservation and energy efficiency pertaining to Power Sector.
- **1.2** As per data provided by the Ministry, India stands 3<sup>rd</sup> in the World in terms of electricity production as well as consumption. In 2023, China produced 9456 TWh and consumed 8392 TWh of electricity; USA produced 4520 TWh and consumed 4065 TWh of electricity; and India produced 1874 TWh and consumed 1407 TWh of electricity.
- **1.3** The All India Power Supply position of the Country, as furnished by the Ministry, is outlined below:

Energy Supplied						
Year	Energy Requirement		Energy Supplied		Energy Not Supplied	
rear	(MU)	% Growth	(MU)	% Growth	(MU)	(%)
2021-22	13,79,812	-	13,74,024	-	5,787	0.4
2022-23	15,13,497	9.7	15,05,914	9.6	7,583	0.5
2023-24	16,26,132	7.4	16,22,020	7.7	4,112	0.3
2024-25	4,52,399	10.9	4,51,811	11.0	588	0.1
(upto June, 2024)						
	<del>_</del>	Pea	ık			
	Peak Demand		Peak Met		Demar	id Not
Year					Mo	et
I cai	(MW)	%	(MW)	%	(MW)	%
		Growth		Growth		
2021-22	2,03,014	-	2,00,539	-	2,475	1.2
2022-23	2,15,888	6.3	2,07,231	3.3	8,657	4.0
2023-24	2,43,271	12.7	2,39,931	15.8	3,340	1.4
2024-25	2,49,856	11.5	2,49,854	11.9	2	0.0
(upto June, 2024)						

### CHAPTER – II ANALYSIS OF DEMANDS FOR GRANTS (2024-25) OF THE MINISTRY OF POWER

**2.1** The Demands for Grants of the Ministry of Power (Demand No. 79) was laid in the Lok Sabha on 1<sup>st</sup> August, 2024. The voted provisions made in the Revenue and the Capital Heads of the demand are as under:

			(In Rs. Crore)
	Revenue	Capital	Total
Charged			
Voted	19415.50	1086.50	20502.00

**2.2** The details of funds demanded by the Ministry of Power *vis-à-vis* funds allocated by the Ministry of Finance, as furnished by the Ministry, are given below:

S.	Name of the Scheme	BE (2024-25)	` ,
No.		proposed by	sanctioned by
		MoP	MoF
		(in Rs. Crore)	(in Rs. Crore)
1	Energy Conservation	39.05	25.00
2	Reform Linked Distribution Scheme	20337.66	12585.00
3	Smart Grid	0.00	0.00
4	Green Energy Corridor	1.00	1.00
5	Interest Subsidy to National Electricity Fund	500.00	500.00
6	Power System Improvement in North Eastern States	0.01	600.01
	excluding Arunachal Pradesh and Sikkim		
7	Strengthening of Transmission System in the States of	0.01	1315.01
	Arunachal Pradesh and Sikkim		
8	Power System Development Fund (PSDF)	1200.00	1200.00
9	Viability Gap Funding	96.00	96.00
10	Scheme for Promoting Energy Efficiency activities in	98.10	40.00
	different sectors of Indian Economy		
	Total (CS)	22271.83	16362.02
11	GoI fully serviced bond issue expenditure and interest	1943.59	1943.59
	(REC Bonds)		
12	Central assistance for Pakul Dul HEP under J&K	671.91	568.68
	PMDP-2015 Project as grant to Chenab Valley Power		
	Projects Private Limited (CVPPPL)		
13	GoI fully serviced bond issue expenditure and interest	376.40	376.40
	(PFC Bonds)		
14	Central Power Research Institute	208.00	180.00
15	Manufacturing Zones under Atmanirbhar Bharat	80.00	80.00
	Package		
16	Reimbursement of Claim for any expenditure already	104.40	80.40
	incurred by NTPC on Lohari Nagpala Hydro Power		
	NTPC		

17	Grant towards cost of Downstream protection work of	51.98	51.98
	Subansiri Lower project (NHPC)		
18	National Power Training Institute	50.00	50.00
19	Payment pertaining to International Arbitration case	12.00	12.01
20	Payment to SDMC- Badarpur Thermal Power Station	16.08	0.00
21	Subsidy to Indian Shipping Companies	0.01	0.00
22	Support for Flood moderation storage Hydro Electric	0.01	449.25
	Projects		
23	Creation of a Central Transmission Utility (CTU)	0.01	0.00
24	Advance Ultra super critical plant in Sipat,	0.01	0.00
	Chhattisgarh		
25	Support for cost of enabling infrastructure i.e.	10.00	60.00
	roads/bridge		
26	Additional fund requirement for PMRP (J&K)	0.01	0.01
	Total (CSS)	3524.41	3852.32
	Total (CS+CSS)	25796.24	20214.34
27	27 Total Establishment		287.66
	Grand Total	26083.90	20502.00

**2.3** Out of total Union Budget (2024-25) of Rs. 48,20,512.08 crore, an amount of Rs. 20,502.00 crore is allocated for the Ministry of Power which is 0.43 % of the total Budget. The details of allocation of Budget for other important Ministries, as furnished by the Ministry of Power, are given below:

S. No.	Ministry	Budget (2024-25) (in Rs. Crore)	% of Total Budget
1	MNRE	19,100.00	0.40
2	Coal	192.55	0.01
3	Ports, Shipping and Waterways	2,377.49	0.05
4	Atomic Energy	24,968.98	0.52
5	MSME	22,137.95	0.46

**2.4** The targets regarding Internal & Extra Budgetary Resources (IEBR) for CPSEs of the Ministry of Power for the financial year 2024-25, as furnished by the Ministry, are given below:

		(In Rs. Crore)
Sl. No.	Name of CPSEs	IEBR Target for 2024-25
1	National Thermal Power Corporation Ltd.	22700.00
2	Power Grid Corporation of India Ltd.	12250.00
3	National Hydro Power Corporation	11761.87
4	Satluj Jal Vidyut Nigam Ltd.	12000.00
5	Tehri Hydro Development Corporation Ltd.	3440.96
6	North Eastern Electric Power Corporation Ltd.	1841.18

7	Damodar Valley Corporation	3262.00
8	Grid India Ltd.	30.00
	Total	67286.01

**2.5** On being asked whether the allocation made for 2024-25 would be sufficient to meet the requirement of the physical targets under various schemes/ programmes, the Ministry furnished the following:

"The allocation made for 2024-25 for the Ministry of Power (MoP) is Rs. 20,502 crore which is lesser than projected by MoP i.e. Rs. 26,083 crore.

However, if the physical targets require more funds due to unforeseen circumstances, the Ministry may try to mobilize additional funds through the following ways:

**Reallocation of funds within the Ministry**: The Ministry may reallocate funds from other programmes to critical programmes where the physical targets are not upto the desired level.

**RE/Supplementary grants**: The Ministry may request for additional funds requirement at RE stage/Supplementary grants from the Government of India to meet the shortfall in funds."

**2.6** Scheduled Capacity Addition during the year 2024-25, as furnished by the Ministry, is given below:

				(In MW)
Sector	Thermal	Hydro	Nuclear	Total
Central	6740	1800	1200	9740
State	8620	200	0	8820
Private	0	1200	0	1200
Total	15360	3200	1200	19760

- **2.7** On being asked about new initiatives including new schemes/programmes proposed to be started during 2024-25, the Ministry furnished the following:
  - "a) Bureau of Energy Efficiency (BEE) under the Ministry of Power has formulated an Energy Efficiency Financing Scheme and Assistance in Deploying Energy Efficient Technologies in Industries & Establishments (ADEETIE). The Scheme intends to facilitate MSMEs to upgrade with energy efficient technologies/measures through financial instruments and handholding them in carrying out investment grade energy audit, detail project report, monitoring and verification of the implementation. The Scheme has budget outlay of Rs 1000 crore from FY 2024-25 to 2030-31. EFC meeting is scheduled on 16.10.2024.
  - b) The Union Cabinet has approved the proposal of the Ministry of Power for providing Central Financial Assistance (CFA) to the State Governments of

North Eastern Region (NER) towards their equity participation for development of Hydro Electric Projects in the North Eastern Region through Joint Venture (JV) Collaboration between State entities and Central Public Sector Undertakings. The Scheme has an outlay of Rs. 4136 crore to be implemented from FY 2024-25 to FY 2031-32. A cumulative hydro capacity of about 15000 MW would be supported under the scheme.

c) With the aim to improve the reliability of power supply in high growth big cities in the country, a team consisting of officers from CEA, NSGM, PFC and REC has been constituted by MoP to assist the states for the preparation of DPRs for system augmentation and smart distribution system in the big high growth cities. Initially, cities namely Varanasi, Patna, Indore, NDMC, Guwahati, Gurugram, Noida & Kanpur have been identified for development of Smart Distribution along with availability of adequate distribution infrastructure with N-1 redundancy in the system for improving the reliability of power supply in these cities. The DPR of Varanasi city for Smart distribution projects has already been approved by the Monitoring Committee at an estimated cost of Rs. 1313 Crore under RDSS. The DPRs of the other identified cities are in progress. MoP is targeting the development of distribution infrastructure and smart technologies in about 60 high load growth cities during next 5 years."

### CHAPTER – III ANALYSIS OF PAST PERFORMANCE OF THE MINISTRY

**3.1** The details of the demands posted by the Ministry of Power and the funds allocated by the Ministry of Finance since the financial year 2019-20, as furnished by the Ministry, are given below:

			(In Rs. Crore)
S. No.	Financial Year	Funds proposed by the Ministry of Power	Funds approved by the Ministry of Finance
1	2019-20	16100.20	15874.82
2	2020-21	17227.22	15874.82
3	2021-22	29658.86	15322.00
4	2022-23	24049.99	16074.74
5	2023-24	25280.89	20671.32

**3.2** The details regarding Budgetary Estimates (BE), Revised Estimates (RE) and the Actual Expenditure during the last five years, as furnished by the Ministry, are given below:

				(In Rs. Crore)
Year	BE	RE	Actual	Expenditure
			Expenditure	(% of RE)
2020-21	15874.82	10835.13	10581.92	97.66
2021-22	15322.00	18416.26	17950.96	97.47
2022-23	16074.74	13106.58	9312.98	71.06
2023-24	20671.32	17635.00	16720.93	94.82
2024-25	20502.00	-	12314.28	60.06
			(upto 30.09.2024)	(w.r.t B.E.)

**3.3** The Scheme-wise details of Budgetary Estimates (BE), Revised Estimates (RE) and the Actual Expenditure, as furnished by the Ministry, are given below:

					(	In Rs. Crore)
S. No.	Name of the Scheme	BE 2023-24	RE 2023-24	Actual Expenditure 2023-24	BE 2024-25	Actual Exp. upto 30.09.24
	A. Co	entral Sect	or Scheme			
1.	Energy Conservation	30.90	26.32	30.40	25.00	24.50
2.	Reform Linked Distribution Scheme	12071.60	10400.00	10064.06	12585.00	8517.38
3.	Power System Development Fund	1000.00	900.00	1004.43	1200.00	761.00

4.	Strengthening of Transmission	1400.00	1409.00	1110.67	1315.01	722.00
	Systems in the states of	2100.00	2107.00		1010.01	,
	Arunachal Pradesh & Sikkim					
5.	Power System Improvement in	987.00	600.00	375.40	600.01	200.00
	North Eastern States excluding					
	Arunachal Pradesh & Sikkim					
	(NERPSIP)					
6.	Smart Grid	14.62	14.62	6.08	0.00	0.00
7.	Green Energy Corridor	1.00	0.01	0.00	1.00	0.00
8.	Interest subsidy to National Electricity Fund	500.00	538.00	453.71	500.00	6.32
9.	Scheme for promoting Energy	103.80	33.56	31.56	40.00	16.67
'.	Efficiency activities in different	103.00	33.30	31.50	40.00	10.07
	Sectors of Indian Economy					
10.	Viability Gap Funding for	0.01	0.01	0.00	96.00	0.00
	development of Battery Energy	0.01	0.01	0.00		0.00
	Storage Systems					
	Total (A)	16108.92	13921.51	13076.31	16362.02	10247.97
	` ` `	nan Centra	Sector Exp	enditure	'	
11.	Central Power Research Institute	208.00	150.00	143.95	180.00	71.65
12	(CPRI)	25.00	25.00	22.04	<b>F</b> 0.00	4 = 00
12.	National Power Training Institute (NPTI)	35.00	35.00	22.94	50.00	15.33
13.	Central Assistance for Pakal Dul	1448.00	604.22	604.22	568.68	568.68
	HEP under J&K PMDP-2015 as					
	grant and loan to Chenab Valley					
	Power Projects Private Limited					
1.4	(CVPPPL)	276.40	276.40	276 20	276.40	100.22
14.	Interest Payment and issuing	376.40	376.40	376.39	376.40	188.23
	expenses on the bond (PFC					
15.	Bonds) Interest Payment and issuing	1945.56	1945.56	1945.56	1943.59	974.49
13.	expenses on the bond (REC	1945.50	1945.50	1945.50	1943.39	9/4.49
	Bonds)					
16.	Lohari Nagpala-Reimbursement	104.40	36.12	36.12	80.40	0.00
10.	to NTPC	107.70	30.12	30.12	00.40	0.00
17.	Payment pertaining to	12.00	22.00	20.36	12.01	0.00
	International Arbitration Case	12.00	22.00	20.50		0.00
18.	Payment to SDMC-Badarpur	16.08	6.00	2.72	0.00	0.00
	Thermal Power Station	10.00		,_		0.00
19.	Grant towards cost of Down	56.98	56.98	56.98	51.98	15.98
	Stream protection work of					- · <del>-</del>
	Subansiri Lower Project (NHPC)					
20.	Manufacturing zones under Atma	100.00	40.00	16.84	80.00	80.00
	Nirbhar Bharat Package					
21.	Creation of a Central	0.01	0.01	0.00	0.00	0.00
	Transmission Utility (CTU)					
22.	Advance Ultra Super Critical	0.01	0.01	0.00	0.00	0.00
	Plants					

23.	Subsidy to Indian Shipping	0.01	0.01	0.00	0.00	0.00
	Companies					
24.	Support for cost of enabling	10.00	10.00	10.00	60.00	19.14
	infrastructure i.e. roads/bridge					
25.	Support for Flood moderation	0.01	109.00	109.00	449.25	0.00
	storage-Hydro Electric Projects					
26.	Additional fund requirement to	0.01	64.00	64.00	0.01	0.00
	PMRP					
27.	Establishment	249.92	258.17	235.53	287.66	133.21
	Total (B)	4562.40	3713.49	3644.61	4139.98	1933.10
	Grand Total (A+B)	20671.32	17635.00	16720.92	20502.00	12314.28

**3.4** The details of CAPEX achievements vis-à-vis targets (year-wise) of CPSEs of the Ministry of Power, as furnished by the Ministry, are given below:

					(In Rs. Crore)
Year	Original	Revised	Actual	Actual	Actual
				(% BE)	( % RE)
2020-21	44468.65	44811.00	47330.33	106.44	105.62
2021-22	50690.52	49006.30	48135.05	94.96	98.22
2022-23	51470.14	52878.08	57384.00	111.49	108.52
2023-24	60805.22	59119.55	62519.84	102.82	105.75
2024-25	67286.01	-	38111.76	56.64	-
			(upto 30.09.2024)		

**3.5** The details of targets and achievement regarding IEBR of CPSEs of the Ministry of Power, as furnished by the Ministry, are given below:

	(In Rs. Cror										
Sr.	Name	F.	Y. 2021-22		F.	Y. 2022-23		F.	Y. 2023-24		
No.	of CPSEs	Target (RE)	Actual	% of RE	Target (RE)	- Armai	% of RE	Target (RE)	Actual	% of RE	
1	NTPC	23736.00	21126.07	89.00	22454.00	26241.29	116.87	22454.00	26087.73	116.18	
2	PGCIL	7500.00	9426.00	125.68	8800.00	8850.00	100.57	8800.00	11710.00	133.07	
3	NHPC	6772.21	5523.35	81.56	7128.95	6464.85	90.68	9006.31	8652.32	96.07	
4	SJVNL	5000.00	5259.39	105.19	8000.00	8239.70	103.00	10000.00	7581.53	75.82	
5	THDCIL	2693.93	3232.51	119.99	3315.00	4615.02	139.22	4877.22	4986.62	102.24	
6	NEEPCO	733.20	707.89	96.55	1133.26	849.45	74.96	1150.02	1004.76	87.37	
7	DVC	2536.95	2752.56	108.50	2010.00	2055.37	102.26	2708.00	2370.95	87.55	
8	GCIL	34.01	107.28	315.44	36.87	68.32	125.83	124.00	125.93	101.56	
•	Total	49006.30	48135.05	98.22	52878.08	57384.00	108.52	59119.55	62519.84	105.75	

**3.6** The details of year-wise budgetary allocation of the Ministry of Power and its actual utilization, as furnished by the Ministry, are given below:

				(In Rs. Crore)
Financial Year	Component	BE	RE	Actual
	GBS	15874.82	15874.82	15321.88
2019-20	EBR	9000.00	8500.00	3782.00
2019-20	IEBR	42407.41	43946.70	58853.92
	Total	67282.23	68321.52	77957.80
	GBS	15874.82	10835.13	10581.92
2020-21	EBR	5500.00	5500.00	2500.00
2020-21	IEBR	44384.38	44745.72	44830.33
	Total	65759.20	61080.85	57912.25
	GBS	15322.00	18416.26	17950.95
2021-22	IEBR	59990.52	49006.30	48135.05
	Total	75312.52	67422.56	66086.00
	GBS	16074.74	13106.58	9312.98
2022-23	IEBR	51470.14	52878.08	57384.00
	Total	67544.88	65984.66	66696.98
	GBS	20671.32	17635.00	16720.92
2023-24	IEBR	60805.22	59119.55	62519.84
	Total	81476.54	76754.55	79240.76

**3.7** When the Committee desired to know about the reasons for variation between Budgetary Estimates (BE), Revised Estimates (RE) and the Actual Expenditure, the Ministry submitted as under:

"The reasons for variation between BE/RE and Actual in respect of Gross Budgetary Support (GBS) component are as follows:

**2019-20**: During the year 2019-20, Budget allocation of ₹15874.82 crore at BE stage was kept at same level at RE stage. The actual expenditure was ₹ 15321.88 crore which is 96.52 % of BE/RE.

**2020-21**: During the year 2020-21, against the allocation of ₹15874.82 crore in BE and ₹10835.13 crore in RE 2020-21, the actual expenditure was ₹ 10581.92 crore which is 66.65 % of BE and 97.66 % of RE. The reduction of budget allocation at RE stage was decided by MoF on the basis of less expenditure due to COVID-19.

**2021-22**: During the year 2021-22, against the allocation of ₹15322.00 crore in BE, allocation was enhanced to ₹ 18416.26 crore at RE/final supplementary stage due to requirement of additional funds for DDUGJY/IPDS schemes, being the sunset year. The actual expenditure was ₹17950.95 crore which is 117.16 % of BE and 97.47 % of RE. So, there is no short fall in expenditure as such.

**2022-23**: In FY 2022-23, Budget allocation was ₹16074.74 crore in BE. At RE 2022-23, budget allocation was ₹13106.58 crore. The actual expenditure incurred was ₹ 9312.98 crore which is 57.94% of BE and 71.06% of RE.

Actual expenditure was less due to delay in receipt of detailed project reports (DPRs) from State Distribution Companies (DISCOMs)/Power Departments and delay in award of sanctioned works by the DISCOMs. With the implementation of newly introduced Treasury Single Account (TSA) module in FY 2022-23, the unspent balances lying with DISCOMs/Power Departments after 31st March of that financial year reverted to Consolidated Fund of India Account, so no unspent left with DISCOMs.

**2023-24**: In FY 2023-24, Budget allocation was ₹20671.32 crore in BE. At RE 2023-24, budget allocation was ₹17635.00 crore. The actual expenditure incurred was ₹ 16720.92 crore which is 80.89% of BE and 94.82% of RE. Actual expenditure was less due delay in getting possession of new office of Central Electricity Regulatory Commission (CERC), non-award of township package, delay in award and new norms for procurement in NER schemes etc. Further, under Reform Linked Distribution Scheme (RLDS), Deen Dayal Upadhyaya Gram Jyoti Yojna (DDUGJY), Saubhagya etc, the unspent balances lying with DISCOMs/Power Departments after 31st March of that financial year reverted to Consolidated Fund of India Account, so interest loss to GoI."

**3.8** The Ministry furnished the following details regarding quarter-wise utilization of budgetary allocations:

						(In Rs. Crore)
FY (Allocation )		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
2019-20	Actuals (₹)	4451.55	5737.51	2606.30	2526.52	15321.88
(15874.82)	Percentage	28.04	36.14	16.41	15.91	96.50
2020-21	Actuals (₹)	2170.00	2348.94	1538.32	4488.66	10581.92
(15874.82-BE) (10835.13-RE)	Percentage against RE	20.02	21.68	14.20	41.42	97.66
2021-22	Actuals (₹)	1728.45	2790.49	3693.63	9738.38	17950.95
(15322.00-BE) (18416.26-RE)	Percentage against RE	11.28	18.21	24.10	52.87	97.47
2022-23	Actuals (₹)	1411.40	4005.93	3248.10	647.55	9312.98
(16074.74-BE) (13106.58-RE)	Percentage against RE	10.77	30.56	24.78	4.94	71.06
2023-24	Actuals (₹)	4929.84	2789.69	2541.88	6459.51	16720.92
(20671.32-BE) (17635.00-RE)	Percentage against RE	27.95	15.82	14.41	36.63	94.82

# **3.9** When the Committee asked the reasons for deviation in quarterly spending, the Ministry stated as under:

"The progress of expenditure/release of scheme funds depends on various factors such as the time of receipt of proposals for release of funds, availability of utilization certificates which are due for the funds released in the past, position regarding unspent balances at the time of receipt of proposals, completion of the process of appraisal and approval of investment proposals. These factors are not always possible to be anticipated in advance."

**3.10** The details regarding scheduled capacity addition and achievements, as furnished by the Ministry, are given below:

(All figures in MW)								
			20	19-20				
Sector	Therr	nal	Hydr	0	Nuclea	ır	Total	
Sector	Scheduled	Ach.	Scheduled	Ach.	Scheduled	Ach.	Scheduled	Ach.
Central	6040	3940	600	300	700	0	7340	4240
State	4256.15	2780	210.99	0	0	0	4467.14	2780
Private	0	45	379	0	0	0	379	45
Total	10296.15	6765	1189.99	300	700	0	12186.14	7065
			20	20-21				
Central	5790.00	4080	300.00	300	0	0	6090.00	4380
State	4276.15	846.15	111.00	111	0	0	4387.15	957.15
Private	525	0	195.00	99	0	0	720.00	99
Total	10591.15	4926.15	606.00	<b>510</b>	0	0	11197.15	5436.15
			20	21-22				
Central	5400	2370	0.0	0	700	0	6100.0	2370
State	4360	1590	100.00	0	0	0	4460.0	1590
Private	525	525	393	393	0	0	918	918
Total	10285	4485	493	393	700	0	11478	4878
			20	22-23				
Central	3580	660	810	0	700	0	5090	660
State	2770	800	220	120	0	0	2990	920
Private	0	0	50	0	0	0	50	0
Total	6350	1460	1080	120	700	0	8130	1580
			20	23-24				
Central	6880	2920	2060	60	1400	1400	10340	4380
State	7820	2120	100	0	0	0	7920	2120
Private	0	364	720	0	0	0	720	364
Total	14700	5404	2880	60	1400	1400	18980	6864

**3.11** Further, the details regarding targets and achievements in respect of Central, State and Private Sector for Transmission Line and Transformation Capacity, as furnished by the Ministry, are given below:

	Transmission Line: [unit: ckt. Km.]							
FY	Central	Sector	State S	ector	Private	Sector	Total	
	Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.
2019-20	5747	4489	14397	6307	3477	868	23621	11664
2020-21	5889	7166	7964	7657	1938	1927	15791	16750
2021-22	3471	4676	12260	8939	3524	1280	19255	14895
2022-23	4035	3926	8661	6816	1885	3883	14581	14625
2023-24	2742	3938	11002	6993	2938	3272	16682	14203
		Tran	sformatio	n Capacit	y: [unit: N	IVA]		
2019-20	27005	30975	44451	32255	10260	5000	81716	68230
2020-21	23870	21330	35970	32035	3210	4210	63050	57575
2021-22	34075	39575	39470	38407	8000	1000	81545	78982
2022-23	36195	30370	37764	40532	5000	5000	78959	75902
2023-24	23590	19720	44199	36008	10320	15000	78109	70728

**3.12** On being asked about the reasons for shortfall in achievement of scheduled targets, the Ministry stated the following:

"Thermal: The reasons for shortfall in targets of thermal power projects in the last five years are given below:

- Effect of COVID-19 during project tenure, quarantine of workers/officials resulting into delay in execution.
- Scarcity of Industrial Oxygen affecting the fabrication work and delaying the project.
- The impact of monsoons and unprecedented rains during other seasons resulted in frequent dewatering causing interruption to the movement of men and machinery which affected the work progress at site.
- Non-performance of sub-contractors at site, re-tendering of some BoP packages delaying the projects.
- Non availability of foreign experts at site, delaying the projects resulting in cost escalation.
- Cost escalation in steel procurement leading to delayed supply of material at sites.
- Frequent agitation/protests by locals demanding higher land compensation leading to litigation resolutions at LARRA court, hampering the progress at project sites.

**Hydro:** The reasons for shortfall in targets for hydro power projects in the last five years are stated below:

- Seepage of water affecting progress of works causing delays.
- Works affected due to heavy rains during the monsoon.
- Delay due to poor geology.
- Agitation by local people.
- Rupture of penstock.

**Transmission:** The reasons for shortfall in targets of transmission projects are as follows.

- Issues relating to Right of Way (RoW), Land/crop compensation demanded by farmers/land owners and court cases linked to RoW issues.
- Getting approval/clearances from Forest/Railway/NHAI/Mining/ Civil Aviation Authority, etc., particularly Forest/Wildlife Board clearance.
- Unexpected Route diversions of transmission lines to protect endangered species like Great Indian Bustards (GIB), coal mining areas etc.
- Problems faced in acquiring land for construction of substations/ bay extensions in existing substations.
- Contractual issues/deteriorating financial condition of executing agencies leading to slow progress of works and sometimes situation forces for cancellation of contract and awarding the contract to a new executing agency.
- Difficulty in mobilizing manpower during festive seasons/monsoon/ winter months and transportation of heavy equipment/material to site during monsoon months.
- Execution in tough hilly terrain requiring more skilled labours and difficulty in transportation of material to site, which require adoption of advanced technology like UAV/helicopters.
- Parliament/Assembly General Elections (enforcement of model code of conduct leads to restrictions in tendering processes and difficulty in getting adequate support from administration in resolving RoW & compensation issues, handling law & order problem etc.)"
- **3.13** About the Special Component Plans for Scheduled Castes and Tribal Areas, the Ministry furnished the following:

"In order to ensure direct policy driven benefits for the SCs, STs, Tribal Areas and North-Eastern Region Areas, SC Sub-Plan (SCSP), Tribal Area Sub-Plan (TASP) and other special component plans were introduced. Under these Plans, funds are earmarked for SCs, STs, etc. under separate budget heads for each Ministry of GoI. The allocation includes programmes benefitting SC/ST hamlets or designing of new appropriate development programmes."

**3.14** On being asked about the allocation and utilization of funds for implementation of these Sub-Plans, the Ministry furnished the following:

FY	SCSP Head (in Rs. Crore)		TASP Head (in Rs. Crore)	
	Allocated	Utilised	Allocated	Utilised
2019-20	674.96	674.96	349.68	349.68
2020-21	403.00	403.00	227.00	226.96
2021-22	783.52	783.52	405.92	405.92

**3.15** When asked about the Schemes/Programmes of the Ministry which have either been closed or proposed to be closed since Demands for Grants (2023-24), the Ministry stated the following:

"The DDUGJY, IPDS and Saubhagaya Schemes were closed as on 31st March, 2022. Further, MoP *vide* letter no. 27/3/2017-IPDS (E-236958) dated 23rd September, 2022; accorded sanction for continuation of National Smart Grid Mission (NSGM) up to 31st March, 2024."

#### CHAPTER - IV SCHEMES/PROGRAMMES OF THE MINISTRY

#### A) Revamped Distribution Sector Scheme (RDSS)

- **4.1** Revamped Distribution Sector Scheme (RDSS) has been formulated with the objective of improving the quality and reliability of power supply to consumers through a financially sustainable and operationally efficient distribution sector. The Scheme aims to reduce the AT&C Losses at pan-India level to 12-15% and ACS-ARR gap to zero. The Scheme has an outlay of Rs. 3,03,758 crore with a Gross Budgetary Support of Rs. 97,631 crore from Government of India over a period of five years from FY 2021-22 to FY 2025-26. The sunset date of the scheme is 31.03.2026.
- **4.2** The details regarding budgetary allocation and actual utilization for RDSS since its inception, as furnished by the Ministry, are given below:

			(In Rs. Crore)
Year	BE	RE	Actual Expenditure
FY 2021-22	0	1,000	814
FY 2022-23	7,566	6,000	2,738
FY 2023-24	12,072	10,400	10,064

**4.3** On being asked whether the amount allocated for RDSS was sufficient, the Ministry stated as under:

"RDSS is a reform-based result linked scheme and release of funds, except 10% of GBS as an advance, under the scheme is contingent upon DISCOMs/Power Departments qualifying the annual evaluations for a particular financial year and based on the actual physical progress under the scheme. As the allocated amount at RE stage was less compared to BE during FY 2022-23 and 2023-24, accordingly release of funds were adjusted to match the actual allocation, though there was markable gap in FY 2022-23 due to introduction of TSA mechanism."

**4.4** When asked about the measures taken to ensure full utilization of the allocated amount, the Ministry stated as under:

"The monitoring and review of works sanctioned under RDSS and utilization of funds is being done by the Ministry on a regular basis and also in Senior Officer's Meeting. Weekly meetings are conducted by Ministry of Power with the States along with the nodal agencies (REC and PFC), to monitor the physical and financial progress."

**4.5** Regarding the performance so far under RDSS, the Ministry furnished the following:

"Projects worth Rs. 2.62 lakh crore for distribution infrastructure and smart metering works have been sanctioned which includes 19.79 crore smart consumer meters, 52.18 lakh smart OT meters and 1.88 lakh smart feeder meters. This also includes works amounting to Rs. 1,033 crore for extension/strengthening of electricity infrastructure in the Northern Border areas for the five States/UTs of Himachal Pradesh, Ladakh, Uttarakhand, Sikkim and Arunachal Pradesh.

So far, around 51% of the sanctioned smart meters and 75% of the sanctioned infrastructure works have been awarded. 12% of overall physical progress has been achieved till date. The balance works are under different stages of tendering process."

# **4.6** About household electrification under RDSS, the Ministry furnished the following:

Under Deen Dayal Upadhyay Gram Jyoti Yojana (DDUGJY) and thereafter under Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA), all States declared all the inhabited un-electrified census villages across the country electrified as on 28th April, 2018 and all willing Households on 31st March, 2019 respectively. While, a total of 18374 Villages were electrified under DDUGJY, a total of 2.86 crore Households were electrified under the aegis of SAUBHAGYA.

While fresh arising of new households is a continuous process and electrification of such households is expected to be taken care of by the Distribution Utilities, the Government of India stands committed to supporting States for electrification of households. Thus, electrification of left out households under SAUBHAGYA, identified PVTG households under PM-JANMAN, households located in remote, hilly areas and the border areas identified under vibrant village program, were also taken up under RDSS. The current progress (as on 21.10.2024) is given below:

S. No.	Name of State	Sanctioned Outlay	Sanctioned GBS	Households Sanctioned
		(In Rs. Crores)	(In Rs. Crores)	builettoffeu
A.	<b>Additional Househo</b>	old Sanctioned u	nder RDSS	
1	Rajasthan	459.18	275.51	1,90,959
2	Meghalaya	435.70	392.13	50,501
3	Mizoram	79.90	71.91	15,167
4	Nagaland	69.55	62.59	10,004
5	Uttar Pradesh	931.04	558.62	2,51,487
6	Andhra Pradesh	49.24	29.54	15,475
7	Jharkhand	7.47	4.48	872

8	Jammu & Kashmir	77.10	69.39	10,730
9	Bihar	119.28	71.57	21,607
10	Assam	785.55	706.99	1,27,111
11	Arunachal Pradesh	47.11	42.40	6,506
12	Manipur	214.44	193.00	36,972
13	Chhattisgarh	316.51	189.90	63,161
	Total (A)	3,592.07	2,668.05	8,00,552
B.	<b>Electrification worl</b>	ks sanctioned un	der RDSS in Vibra	ınt Villages
1	Himachal Pradesh	6.08	5.47	-
2	Arunachal Pradesh	20.18	18.16	1,683
3	Uttarakhand	13.08	11.77	1,154
	Total (B)	39.34	35.41	2,837
C.	Electrification of PV	TG Households	through Grid Con	nectivity under
	PM-JANMAN		_	-
1	Andhra Pradesh	88.71	53.23	25,054
2	Bihar	0.28	0.17	51
3	Chhattisgarh	38.17	22.90	7,077
4	Jharkhand	74.13	44.47	12,442
5	Madhya Pradesh	143.39	86.02	29,290
6	Maharashtra	26.61	15.96	8,556
7	Rajasthan	40.34	24.20	17,633
8	Karnataka	3.77	2.26	1,615
9	Kerala	0.86	0.52	345
10	Tamil Nadu	29.89	17.94	10,673
11	Telangana	6.79	4.07	3,884
12	Tripura	61.52	55.37	11,664
13	Uttarakhand	0.60	0.54	669
14	Uttar Pradesh	1.10	0.66	316
	Total (C)	516.15	328.31	1,29,269
D.	Electrification of DA	A-JGUA Househol	lds	,
1	Chhattisgarh	11.98	7.19	2,550
2	Maharashtra	2.07	1.24	480
	Total (D)	14.05	8.43	3,030
Gran	d Total (A+B+C+D)	4,161.61	3,040.19	9,35,688

**4.7** With respect to household electrification in the Country, the Secretary, Ministry of Power clarified during the evidence, as under:

"We have given approval for about 9 lakh left out households. I am grateful to the Standing Committee in this matter. We were directed by the Committee that wherever households don't have electrification, may be included in RDSS. On the instructions of the Committee, we have taken up works of Rs 4,161 crore. If there are more left out households, we are ready to cover them too. This window will be open for all the states.

Under the guidance of the Committee, we did one more thing that earlier our norm was that we used to give Rs 22 thousand per household.

The Committee observed that they are left out because they do not come under your norms, so the norms be revised. We have revised the norms to Rs. 85 thousand per household. Only after this, all these 9 lakh 17 thousand households have been covered."

**4.8** Regarding AT&C Losses in the Country, the Ministry furnished the following:

"There is reduction in National Level AT&C Losses from the level of 27.8% for the FY 2008-09 to 16.2% for the FY 2021-22 (data based on PFC Report on Integrated Rating of DISCOMs). With the introduction of RDSS, the AT&C Losses have further come down to 15.37% in FY 2023. This reduction in losses is a result of a number of reforms and measures which includes:

- (i) Rules brought in to ensure timely reconciliation and payment of subsidies declared by State Governments.
- (ii) Ensuring that the tariff and true-up orders are issued in time.
- (iii) Ensuring Energy Accounting and Audit.
- (iv) Prudential Norms formulated providing that no DISCOM of a State Government will be able to get loans from PFC/REC if the DISCOM is making loss, unless the DISCOM, with the approval of the State Government, works out a plan for loss reduction and files it with the Central Government, and adheres to that loss reduction trajectory.
- (v) Providing an incentive of additional borrowing space of 0.5% of GSDP of State if the DISCOM implements various loss reduction measures, including efforts to comply with AT&C loss reduction trajectory.
- (vi) Providing that loss making DISCOMs will not be able to draw funds under any Power Sector Scheme of Gol unless necessary measures taken for loss reduction."
- **4.9** When the Committee specifically asked for details of the States where AT&C Losses have increased during the last five years and the States which are not able to meet the targets for reduction in AT&C Losses, the Ministry stated the following:

"AT&C Losses have increased for the States of Jharkhand, Maharashtra, Mizoram and Telangana during the last 5 years. Arunachal Pradesh, Chhattisgarh, PGVCL & UGVCL (Gujarat), Jharkhand, MP-West (Madhya Pradesh), MSEDCL (Maharashtra), Mizoram, Nagaland, Puducherry, Sikkim and Tripura have reduced their losses but were not able to meet the targets for AT&C Losses in FY 2023."

**4.10** As per Report on Performance of Power Utilities published by PFC, the percentage of AT&C Losses of Private and Government Discoms, as furnished by the Ministry, are given below:

Year	Government Sector DISCOMs (AT&C Losses)	Private Sector DISCOMs (AT&C Losses)	All India (AT&C Losses)
2020-21	22.6%	13.86%	21.91%
2021-22	16.47%	13.53%	16.23%
2022-23	15.78%	10.94%	15.37%

**4.11** The details regarding financial performance of DISCOMs at National level, as furnished by the Ministry, are given below:

National Level Figures	FY	FY	FY
	2020-21	2021-22	2022-23
Borrowings (Rs. Crore)	5,79,905	6,17,179	6,87,155
Accumulated Losses (Rs. Crore)	(5,55,128)	(5,89,371)	(6,53,765)
ACS-ARR Gap (Rs./unit)	0.63	0.10	0.46
Billing Efficiency (%)	80.54	82.49	83.63
Collection Efficiency (%)	91.01	96.07	96.39

**4.12** On being specifically asked about the States where financial performance of DISCOMs has deteriorated, the Ministry furnished the following:

"ACS-ARR Gap has increased for the States of Assam, Chandigarh, Chhattisgarh, Dadra & Nagar Haveli & Daman & Diu, Delhi, Goa, Gujarat, Himachal Pradesh, Jharkhand, Kerala, Ladakh, Maharashtra, Manipur, Meghalaya, Mizoram, Puducherry, Punjab, Telangana, Tripura, Uttar Pradesh and Uttarakhand.

**Billing Efficiency** has reduced for the States of Sikkim, Telangana and Uttarakhand.

**Collection Efficiency** has reduced for the States of Arunachal Pradesh, Chandigarh, Goa, Gujarat, Haryana, Kerala, Meghalaya, Nagaland, Odisha and Telangana.

Accumulated Losses have increased for the States/UTs of Andaman & Nicobar Islands, Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Goa, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Ladakh, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Punjab, Rajasthan, Tamil Nadu, Telangana, Tripura, Uttar Pradesh and Uttarakhand."

#### **4.13** About Smart Meters, the Ministry furnished the following:

"A smart meter is an advanced version of electronic meter with two way communication and remotely operated connect/disconnect switch inside the meter. The smart meter works as a dedicated intelligent system which consists of a meter, a communication infrastructure to connect the meter with the data centre integrated with the Meter Data Management (MOM) System at the Data Centre or on Cloud. The main objective of smart

metering is to enable near real time two-way communication between Smart Meter and Data Centre so as to enable remote reading, monitoring and control of meters at the consumer end. Further, smart meters can also be used as prepaid meters or net meters as per the requirement.

Under the scheme, following provision has been kept for prepaid smart metering:

- a grant of Rs. 900 or 15% of the cost per consumer meter (whichever is lower). For 'Special Category States' a grant of Rs. 1350 or 22.5% of the cost per consumer (whichever is lower).
- an additional incentive of 7.5% of the cost per consumer meter or Rs. 450 (whichever is lower), however for 'Special Category States', 11.25% or Rs. 675 per consumer meter (whichever is lower) would also be provided to incentivize the States/UTs to fast-track installation of prepaid Smart Meters by December, 2023."
- **4.14** On being asked about the details regarding achievements *vis-à-vis* targets for installation of Smart Meters, the Ministry furnished the following:

					(No. in Lakhs)
Smart meters	FY 2023	FY 2024	FY 2025	Total	Achievement
	(Target)	(Target)	(Target)	Target	(under various
					schemes)
Consumer Meters	2.75	1352.76	1979.21	1979.21	129.83
OT Meters	12.30	52.18	52.18	52.18	0.89
Feeder Meters	1.85	1.88	1.88	1.88	0.22
<b>Grand Total</b>	16.90	1406.82	2033.27	2033.27	130.94

**4.15** On being asked about the manufacturing capacity of Smart Meters in the Country, the Ministry stated as under:

"As per the information available, the manufacturing capacity of smart meters in the country is around 10 Crore meters per year and Indian Metering Industry has sufficient manufacturing capacity so as to meet the requirement of smart meters as per time lines under RDSS."

**4.16** When asked about the constraints being faced in speedy installation of Smart Meters, the Ministry submitted the following:

"Some of the main constraints faced in speedy installation of smart meters are:

- To enhance awareness for adoption of new technology at consumer and utility level;
- Delay in tendering and award of smart meter works by the utilities;
- Developing a dedicated IT team at distribution utility level having knowledge of smart meters."

#### B) Strengthening of Power Systems

- **4.17** The Ministry furnished that the following works are included under 'Strengthening of Power Systems' Programme:
  - a) "North Eastern Region Power System Improvement Project (NERPSIP) for Six (6) States (Assam, Manipur, Meghalaya, Mizoram, Tripura and Nagaland) for strengthening of the Transmission and Distribution Systems (33kV and above).
  - b) Comprehensive Scheme for Strengthening of Transmission and Distribution System in Arunachal Pradesh and Sikkim.
  - c) Setting up of Renewable Energy Management Centre under Green Energy Corridor.
  - d) National Electricity Fund."
- **4.18** About North Eastern Region Power System Improvement Project (NERPSIP), the Ministry submitted the following:

"Implementation of this project (as Central Sector Scheme, with funding on 50:50 basis by GoI & World Bank) would strengthen the Intra-State transmission & Distribution infrastructure of six states of North Eastern Region (Assam, Meghalaya, Manipur, Mizoram, Nagaland and Tripura); improve its connectivity to the upcoming load centers, and thus would extend the benefits of the grid-connected power to all the consumers. The project would also provide the required grid connectivity to such villages and towns of the States, where development of distribution system at the downstream level has been taking place under GoI sponsored schemes. NERPSIP covers many transmission & distribution lines & sub-stations at 33 kV, 66 kV, 132 kV and 220 kV voltage levels. Other general details are as follows:

Date of Government approval	December 2014
Implementing Agency	POWERGRID
Sanctioned Cost (Rs. Crore)	Rs. 5111.33 Crore (at February 2014 price level)
Revised Cost Estimates	Rs. 6700.00 Crore (approved in December 2020)
Funding	50:50 (Government of India: World Bank)
Completion schedule	December 2018 (48 months from date of release of
	1 <sup>st</sup> installment)
Anticipated Schedule	December 2024

**4.19** On being asked about the present status of North Eastern Region Power System Improvement Project (NERPSIP), the Ministry submitted the following:

"Out of 446 elements in six states, 439 elements are completed and remaining 07 elements are targeted to be completed by December 2024 i.e.

during FY 2024-25. Further, an amount of Rs. 200.00 crore has been released to POWERGRID towards project cost *vide* MoP's Sanction order dated 30.09.2024 in the current FY. The summary of element-wise progress is given below.

S. No.	State	Total Elements Sanctioned (Nos.)	Elements Completed (Nos.)
1	Assam	116	116
2	Manipur	71	70
3	Meghalaya	41	41
4	Nagaland	56	54
5	Mizoram	11	11
6	Tripura	151	147
Total		446	439

**4.20** About Comprehensive Scheme for Strengthening of Transmission and Distribution System in Arunachal Pradesh and Sikkim, the Ministry submitted the following:

"Presently, only 05 out of 20 districts of Arunachal Pradesh are connected to transmission network at 132/220kV. The 33kV system is the backbone of power distribution system in the State. Due to low population density spread over its geographical area of 84,000 Sq.km, power demand in Arunachal Pradesh is scattered over large distances. Hence, it is necessary to strengthen the 132kV network in the state for proper voltage management and lower distribution losses. Similarly, the distribution system in Sikkim mainly relies on 66kV network, which needs to be strengthened substantially. In view of this, it was proposed to take up projects for strengthening intra-state T&D systems of the two States through 31 new 132kV Sub-stations, 12 Substations of 66/11kV, 2153 km of transmission lines (132 & 220kV and 66kV) and 1923 km of transmission lines (33kV). The project is being implemented through POWERGRID. Other general details are as follows:

Date of Government approval	October 2014
Implementing Agency	POWERGRID
Estimated Cost (Rs. Crore)	Rs. 4754.42 Crore
Revised Cost (Rs. Crore)	Rs. 9129.32 Crore (approved in March 2021)
Funding	Government of India
<b>Approved Completion schedule</b>	March 2025

**4.21** On being asked about the present status of Comprehensive Scheme for Strengthening of Transmission and Distribution System in Arunachal Pradesh and Sikkim, the Ministry submitted the following:

"Out of 294 elements in the two states, 182 elements are completed and remaining 112 elements are targeted to be completed by March 2025 i.e. during FY 2024-25. Further, an amount of Rs. 772.00 crore has been released to POWERGRID towards project cost and consultancy fee *vide* MoP's Sanction order dated 10.09.2024 in the current Financial Year. The summary of element-wise progress is given below.

S.	State	Total Elements	Elements
No.		Sanctioned (Nos.)	Completed (Nos.)
1	Sikkim	55	41
2	Arunachal Pradesh	239	141
	Total	294	182

**4.22** The details regarding Budgetary Estimate, Revised Estimate and the Actual Utilization under Strengthening of Power Systems Programme, as furnished by the Ministry, are given below:

								(In	Rs. Crore)
Year	Power System			Strengthening of			Green Energy		
	Impro	vement	in North	trans	transmission System in the States of Arunachal Pradesh and Sikkim		Corridor (REMC)		
	Eastern	States e	excluding	the S					
	Aruna	chal Prac	desh and	Pra					
	Sikkim (NERPSIP)		(Comprehensive Scheme)						
FY	BE	RE	Actual	BE	RE	Actual	BE	RE	Actual
2019-20	570	770	770	595	800	800	15	1.5	1.5
2020-21	770	281	281	800	300	300	33	18.67	18.7
2021-22	600	675	530	600	1100	600	14.95	18.16	9.07
2022-23	644	973	844	1700	1145.60	730.00	13.11	13.11	13.11
2023-24	987	600	375.40	1400	1409.00	1110.67	1.00	0.01	0.01

**4.23** On being asked about the reasons for under-utilization of allocated funds, the Ministry stated as under:

"Fund released has not been fully utilized due to various reasons such as delay in release of final retention payment, delay in award of township packages, reduction in line lengths, savings in procurement of land for substations, delay in compensation assessment and disbursement in the lines passing through forest area etc. under Power System Improvement in North Eastern States excluding Arunachal Pradesh and Sikkim (NERPSIP) and Strengthening of transmission System in the States of Arunachal Pradesh and Sikkim (Comprehensive Scheme)."

#### C) Viability Gap Funding (VGF)

**4.24** Regarding Viability Gap Funding Scheme for development of Battery Energy Storage Systems, the Ministry submitted the following:

"The Government has approved the Viability Gap Funding (VGF) for development of Battery Energy Storage Systems. The scheme has set a target of adding atleast 4,000 MWh of BESS by 2027-28 by providing the VGF of Rs. 3,760 crore in the form of Capital subsidy. 5 GWh through States, 5 GWh through CPSUs and 2 GWh through market mechanisms are being brought. Tenders for 1 GWh market mechanism are under way."

**4.25** The details of the budgetary allocation and actual utilization for Viability Gap Funding Scheme since its inception, as furnished by the Ministry, are given below:

Year	BE	RE	Actual	Remarks		
	(Rs.	(Rs.	Expenditure			
	crore)	crore)	till 21st			
			October, 2024			
2023	0.01	0.01	Nil	Disbursement of funds will commence		
-24				from FY 2024-25.		
2024	96	46	Nil	On the basis of low price discovered in		
-25			(Tendering	BESS tender reverse auction, VGF has		
			under	been reduced to Rs. 46 lakh per MWh.		
			progress)	(for Trench-I of 1000 MWh, total VGF is		
				460 crore and 10% of this is 46 crore).		

**4.26** About Viability Gap Funding Scheme, the Secretary, Ministry of Power, explained during the evidence, as under:

"We got approval for implementation of 4000 MW hours and an amount of Rs. 3760 crore was allocated. Battery prices have decreased significantly in the last one year. In this, prices have decreased by more than 30 %.It is expected that prices will further decrease by 10-15 % in the next one year. Our Viability Gap Funding requirement has decreased significantly. Now we are going to support 12,000 MW hours with the same amount. Currently, tenders for 1000 MW hours are under process and the target is to allocate this capacity in the month of October. We have given a target of 5000 MW hours to RE rich states last week. Apart from this, the target of 5000 MW hours for other states, is also going to be implemented through CPSUs. Our target is that by June 30, 2025, contracts of 12000 MW hours should be in place and the states would start getting its benefits in 18 months."

#### D) National Smart Grid Mission (NSGM)

**4.27** About the National Smart Grid Mission, the Ministry submitted the following:

"The Government of India launched 'National Smart Grid Mission (NSGM)' in March 2015 for planning, monitoring and implementing policies & programs related to Smart Grid in India. MoP *vide* letter no. 27/3/2017-APDRP, dated 7th May, 2018; sanctioned continuation of NSGM up to 2020 with a total outlay of Rs. 990 Crore including budgetary support of Rs. 312 Crore from Government of India. Further, MoP *vide* letter no. 27/3/2017-IPDS (E-236958) dated, 23rd September, 2022; accorded sanction for continuation of NSGM up to 31st March, 2024 with an estimated outlay of Rs.136.95 Crore including budgetary support of Rs 45.42 Crore from Government of India for 1st April, 2021 to 31st March, 2024. 11 Nos. of Smart Grid pilot projects and 2 Smart Grid projects under NSGM were deployed at various geographical locations in the country to test Smart Grid functionalities under NSGM."

**4.28** The details of the budgetary allocation and its utilization for Smart Grid Mission, as furnished by the Ministry, are given below:

		(In Rs. Crore)	
Year	BE	RE	Actual Expenditure
2019-20	62.15	39.55	6.10
2020-21	40.00	20.00	16.08
2021-22	40.00	28.40	2.24
2022-23	35.73	28.56	25.77
2023-24	14.62	14.62	6.076

**4.29** The Ministry submitted that under NSGM, 2 Smart Grid Projects i.e. Chandigarh (Sub Div-5) and 6 urban towns of JVVNL, Rajasthan are being implemented. The status of these two Smart Grid Projects, as furnished by the Ministry, is given below:

Sr.	Project Area/	Sanction	Approved	GoI	Status
No	State/UT	Date	project cost	Support	
1	Chandigarh (Sub	April	28.58	8.57	Till May, 2024, all Smart Meters
	Div-5)	2016	Crore	Crore	as per surveyed quantity (24,214)
					installed in field. O&M of already
					installed meters commenced
					from 1st July 2023. GoI grant of
					Rs 7.7124 Crore released.
2	6 urban towns of December		87.43	25.56	The project completed with
	JVVNL (Baran,	2019	Crore	Crore	1,45,343 Smart Meters and final
	Bharatpur,				tranche grant released in March

Bundi, Dholpur, Jhalawar & Karauli), Rajasthan			2024. Project O&M commenced from 1st November 2023. Gol Grant of Rs 25.56 Crore released.
Total	116.01 Crore	34.13 Crore	

**4.30** The Ministry stated that the main reason for delay in implementation of the above mentioned projects is the non-availability of 70% funding of the projects with the utilities.

#### **CHAPTER - V**

# STATUTORY/AUTONOMOUS BODIES UNDER THE ADMINISTRATIVE CONTROL OF THE MINISTRY

# A) Central Electricity Authority (CEA)

**5.1** The details of budgetary allocation and utilization in respect of Central Electricity Authority, as furnished by the Ministry, are given below:

			(In Rs. Crore)
Year	BE	RE	Actual Expenditure
2019-20	122.15	125.57	116.61
2020-21	130.66	126.27	113.95
2021-22	130.66	129.05	113.70
2022-23	121.00	124.87	124.18
2023-24	135.04	140.92	135.33

**5.2** On being asked about the sufficiency of the funds and measures under-taken by CEA to ensure full utilization of the allocated amount, the following was stated:

"There were some heads which got less allocation *viz* DTE, FTE and Training expenses. This resulted in less capacity building due to low-mobility of the officials. It also affects physical monitoring of various ongoing projects as well as attending crucial meetings/training programs both domestically and internationally. Following measures are proposed by CEA for full utilization of allocated amount:

- a) Periodic monitoring at the level of Chairperson, CEA with all Divisions/subordinate offices.
- b) Threadbare scrutiny of expenditure statements and realistic assessment of future budgetary requirements.
- c) Follow up as per extant guidelines of Department of Expenditure on regular basis."
- **5.3** On being asked about the constraints that CEA has been facing in achievement of its objectives, the following was furnished:
  - "a) Manpower constraints Most of the Divisions are not having Directors or having less Directors than the sanctioned strength. Similarly, officers are less at other levels also. There is manpower constraint considering overall 36.5% shortage of CPES/Non CPES employees in CEA (i.e. presently filled strength of 724 against sanctioned posts of 1141), which has an adverse impact on day-to-day working & overall work efficacy. Further, above shortage also limits requisite Capacity Building of officers/officials in terms of deputation of officers including CSS postings, trainings, and higher job satisfaction. For being more effective, appropriate manpower, timely filling up of vacancies, adequate training etc. are required.

- b) The National Training Policy 2012 recommends that each Ministry/Department/Organization set aside at least 2.5% of its salary budget for training. The budget allocated for Training in 2024-25 for CEA is 1.07 Crore i.e. 1.8% of Salary Budget of CEA, which is much less than 2.5%. These fund constraints impacts the quality of training for CEA officers. The power sector at present is on the cusp of technological revolution when several new technologies are emerging. Less training and exposure of CEA officers in emerging technologies is one of the constraints being faced. Further, limited role of CEA in implementation of schemes/programmes in power sector, leads to limited exposure to its officers to actual vibes from the ground level.
- c) Availability of only one license of the state-of-the-art Computer Generation Expansion Planning Model with CEA. More number of planning tools are required for expediting the Resource Adequacy Studies.
- d) Issues in assessment of Comprehensive Cost Trajectory of upcoming/New Technologies e.g., CCUS, AUSC etc. which has to be taken in consideration while carrying out generation expansion planning studies."
- **5.4** When asked about the expectations of CEA from the Central Government/ Ministry/State Governments regarding achievement of its goals/targets/objectives, the following was submitted:
  - "a) The fundamental key to effective functioning of CEA is the availability of comprehensive and qualitative statistics from all the stakeholders of the power sector. The availability of these statistics in a seamless manner would enhance the planning and operational interventions of CEA for coordinated development of the power sector. Further, the Regulations framed by CEA are required to be complied with by all the entities of power sector to ensure reliable and safe operation of the power system.
  - b) To streamline the concurrence process for hydro projects, the Central Electricity Authority (CEA) proposed the establishment of a Single Window Cell in CEA itself with officers from CWC, GSI and CSMRS. Posting of officers from CWC, GSI, and CSMRS in the Cell will accelerate the concurrence process for hydro projects.
  - c) The vacancies are reported to recruiting agencies like UPSC, SSC & to cadre authorities MoP/DoPT on regular basis. Requisite directions may be issued to recruitment agencies to bridge the gap in sanctioned manpower *visa-vis* posted manpower in CEA at earliest possible. It is suggested to permit projection of 1.2 times the actual vacancies considering the fact that only about 80% of vacancies reported gets filled. Further, it can help in creating reserve list from which officers can be appointed in case some officer do not join even after getting appointment offer or resigns after joining within a short span of time.

- d) More qualitative trainings can be imparted to CEA officers for increasing their skill, knowledge and competence if the funds for training are increased appropriately by MoP. CEA can be made more effective by ensuring training to the officers in emerging technologies. CEA can play quality control/monitoring role in flagship scheme of Central Government in power sector and insights obtained from such learning can be dovetailed into planning process and advice given by CEA.
- e) Timely furnishing of data by state government."

### B) Bureau of Energy Efficiency (BEE)

**5.5** The details of budgetary allocation and actual utilization in respect of BEE, as furnished by the Ministry, are given below:

				(In Rs. Crore)
Sl. No.	Sub-Head	BE	RE	Actual
				Expenditure
	FY 2019-20			
Scheme	e: Promoting Energy Efficiency Activities in differen			
1	SDA Strengthening Programme	45.00	45.00	45.00
2	Contribution to SECF	6.00	6.00	6.00
3	Agriculture DSM	5.00	5.00	5.00
4	Municipal DSM	4.16	4.16	4.16
5	Capacity building of DISCOMS	10.00	10.00	10.00
6	SMEs	5.00	5.00	5.00
7	Agriculture DSM-Cold Chain			
8	Building Energy Efficiency	25.00	25.00	25.00
	Total of (A)	100.16	100.16	100.16
Scheme	e: Ongoing EAP Scheme under "BEE" head			
1	BEE-GEF-UNDP (External Aided Project)	3.21	3.21	0.50
	Total of (A+B)	103.37	103.37	100.66
Scheme	e: Energy Conservation Schemes			
1	NMEEE	80.00	80.00	76.01
2	EC Award & Painting	30.00	30.00	-
3	EC Awareness			20.00
	Total of (C)	110.00	110.00	96.01
	Total of (A+B+C)	213.37	213.37	196.67
	FY 2020-21	·		
Scheme	e: Promoting Energy Efficiency Activities in differen	nt sectors of Ind	lian Econom	y
1	SDA Strengthening Programme	45.00	30.00	30.00
2	Contribution to SECF	6.00	6.00	6.00
3	Agriculture DSM	5.00	5.00	5.00
4	Municipal DSM	4.16	-	-
5	Capacity building of DISCOMS	10.00	0.32	-
6	SMEs	5.00	5.00	5.00
7	Agriculture DSM-Cold Chain			
8	Building Energy Efficiency	25.00	10.00	10.00
	Total of (A)	100.16	56.32	56.00
Scheme	e : Ongoing EAP Scheme under "BEE" head	•	•	•
1	BEE-GEF-UNDP (External Aided Project)	3.21	0.01	-

	Total of (A+B)	103.37	56.33	56.00
Schem	e: Energy Conservation Schemes			
1	NMEEE	79.99	11.95	-
2	EC Award & Painting	10.00	5.00	5.00
3	EC Awareness	20.00	20.00	
	Total of (C)	109.99	36.95	5.00
	Total of (A+B+C)	213.36	93.28	61.00
	FY 2021-22		·	
Schem	e: Promoting Energy Efficiency Activities in differen	t sectors of Ind	lian Economy	
1	SDA Strengthening Programme	55.00	55.00	55.00
2	Contribution to SECF	6.00	6.00	6.00
3	Agriculture DSM	7.82	7.82	7.82
4	Municipal DSM	7.00	7.00	7.00
5	Capacity building of DISCOMS	10.00	10.00	10.00
6	SMEs	5.00	5.00	5.00
7	Agriculture DSM-Cold Chain			
8	Building Energy Efficiency	25.00	25.00	25.00
	Total of (A)	115.82	115.82	115.82
	e: Ongoing EAP Scheme under "BEE" head			
1	BEE-GEF-UNDP (External Aided Project)	2.00	2.00	-
	Total of (A+B)	117.82	117.82	115.82
	e: Energy Conservation Schemes			
1	NMEEE	50.00	20.00	20.00
2	EC Award & Painting	5.00	5.00	5.00
3	EC Awareness	25.00	15.00	15.00
	Total of (C)	80.00	40.00	40.00
	Total of (A+B+C)	197.82	157.82	155.82
Caham	FY 2022-23	t anatona of Ind	lian Egonomy	
	<b>e</b> : Promoting Energy Efficiency Activities in different SDA Strengthening Programme	65.00		42.00
<u>1</u> 2	Contribution to SECF	6.00	42.00	42.00
3	Agriculture DSM	10.00	6.30	5.00
<u>3</u>	Municipal DSM	7.00	6.00	5.00
5	Capacity building of DISCOMS	15.00	-	-
6	SMEs	15.00	8.00	3.58
7	Agriculture DSM-Cold Chain	13.00	3.00	3.00
8	Building Energy Efficiency	30.00	25.00	11.93
9	Enforcement of Energy Conservation Act	-	0.20	-
10	EE for Vehicles	_	0.50	0.26
11	EE for Electric Vehicles	_	10.00	1.39
12	Formulation of R & D for Energy Efficiency	_	1.00	-
	Technologies			
13	EC Award & Painting	-	5.00	5.00
14	Awareness Campaign	-	6.00	-
	Total of (A)	148.00	113.00	77.16
Schem	e: Ongoing EAP Scheme under "BEE" head	1		
1	BEE-GEF-UNDP (External Aided Project)	2.00	2.00	-
1	BEE-GEF-UNDP (External Aided Project)  Total of (A+B)	2.00 <b>117.82</b>	2.00 <b>115.00</b>	77.16
	1 , , ,			
	Total of (A+B)			
Schem	Total of (A+B)  e: Energy Conservation Schemes	117.82	115.00	77.16

	Total of (C)			0.00	30.00		0.00
Total of (A+B+C)				97.82	145.00		77.16
	FY 2023-2	24					
Scheme	<b>Scheme :</b> Promoting Energy Efficiency Activities in different sectors of Indian Economy						
S. No.	Sub-Head	BE		RE	Re-		Actual
					Validation		Expendit
					unspe		ure
					balance		
					2022-2		
1	SDA Strengthening Programme	16.0		5.76	16.00		21.76
2	Contribution to SECF	2.00		0	2.00		2.00
3	Agriculture DSM	6.30		0	2.57		2.57
4	Municipal DSM	5.00		0	2.25		2.25
5	Capacity building of DISCOMS	10.0		4.15	2.10		6.25
6	SMEs	15.0	0	2.25	5.95		8.20
7	Agriculture DSM -Cold Chain	4.50	)	0	2.50		2.50
8	Building Energy Efficiency	20.0	0	9.70	7.68		17.38
9	Enforcement of Energy Conservation Act	1.00	)	1.00	-		1.00
10	EE for Vehicles	1.00	)	0.26	-		0.26
11	EE for Electric Vehicles	5.00	)	1.87	2.00		3.87
12	Formulation of R & D for Energy Efficiency	6.00	)	1.25	1.00		2.25
	Technologies						
13	EC Award & Painting	5.00	)	3.88	5.00		8.88
14	Awareness Campaign	5.00	)	1.44	3.78		5.22
	Total of (A)	101.8	30	31.56	52.83	3	84.39
Scheme	e: Ongoing EAP Scheme under "BEE" head						
1	BEE-GEF-UNDP (External Aided Project)	2.00	)	-	0		0
	Total of (A+B)	103.8	30	31.56	52.83	3	84.39
Scheme	e: Energy Conservation Schemes						
1	NMEEE	30.9	0	30.40	4.09		34.49
2	EC Award & Painting	-		-	-		-
3	EC Awareness	_		-	-		-
	Total of (C)	30.9		30.40	4.09		34.49
	Total of (A+B+C)	134.7	70	61.96	56.92	2	118.88

- **5.6** In accordance with the third-party study conducted by BEE for evaluating the impacts of energy efficiency and energy conservation activities undertaken during FY 2022-23, the following are the anticipated achievements of Energy Efficiency Schemes/Programmes:
  - "Total Electrical Savings of 306.55 Billion Units.
  - Annual Thermal energy savings of 24.68 Million Tonnes of oil equivalent.
  - Total annual cost savings worth INR 1,94,320 Crores approximately.
  - Total annual Energy savings of 50.98 Million Tonnes of Oil Equivalent i.e. 6.65% of total primary energy supply of the country.
  - $\bullet$  Equivalent reduction in  $CO_2$  emissions of around 306.40 Million Tonnes annually."

**5.7** On being asked about the sufficiency of the funds and measures under-taken by BEE to ensure full utilization of the allocated amount, the following was furnished:

"The funds allocated were less than the amount sought. Despite the shortfall, BEE has strategically managed its resources to ensure the continued progress and success of its initiatives. The Bureau of Energy Efficiency (BEE) has implemented a series of robust measures to ensure full utilization of the allocated funds. These measures are designed to facilitate efficient project execution, continuous monitoring, and comprehensive review processes. The following steps have been taken to achieve this objective:

- a) **Timely award of works to implementing entities**: BEE ensures the prompt award of works to implementing entities, including State Designated Agencies (SDAs) and other concerned agencies.
- b) Regular monitoring of activities/tasks: i) Monthly reports on the implementation of various activities/programmes are obtained from the implementing entities to closely monitor both physical and financial progress. This allows ensuring that projects are on track and funds are being utilized as intended. ii) Regular one-to-one meetings are organised with these entities to address issues or challenges faced during program implementation. This approach helps in identifying and resolving potential bottlenecks in a timely manner.
- c) Reviewing the physical and financial progress of activities: i) For SDAs, BEE organizes biannual National level meetings and quarterly Regional level meetings to review the progress of various activities, programmes, and schemes being implemented. These meetings serve as platforms for in-depth discussions on the physical and financial progress of SDAs. ii) Additionally, these meetings focus on sharing "best practices" from some SDAs, providing a platform for active peer learning. This exchange of knowledge and experiences enhances the effectiveness of program implementation across all SDAs."
- **5.8** On being asked about the constraints that BEE has been facing in achievement of its objectives, the following was stated:

"BEE is facing the following constraints in achieving its objectives:

a) **Insufficient staffing:** BEE is currently functioning with an allocated regular staff of only 29 members. This number is grossly insufficient given the extensive range of tasks being performed and the increased activities and mandates following the amendment of the Energy Conservation Act in 2022 to include Energy Transition activities. The limited staff resources constrain BEE's capacity to efficiently manage and execute its growing responsibility of programs and initiatives.

- b) Challenges faced by State Designated Agencies (SDAs): SDAs are responsible for facilitating and enforcing the efficient use of energy and its conservation at the state level. However, most of the SDAs are existing organizations that have been assigned the additional responsibility of energy efficiency and conservation. The organizational structure of SDAs varies significantly across States, with Renewable Energy Development Agencies, Power Departments, Electrical Inspectorates, Distribution Companies, and Standalone SDAs. Only two States, Kerala and Andhra Pradesh, have established Standalone SDAs. SDAs with additional responsibilities often lack dedicated physical and fiscal resources for the implementation of Energy Conservation activities. This scarcity of dedicated resources hampers the pace and effectiveness of Energy Conservation initiatives within the states. In States with Standalone SDAs, the implementation of Energy Conservation programs is more aggressive, and these agencies are in a better position to perform their mandated functions compared to states where such dedicated agencies do not exist.
- c) Coordination across multiple departments: Energy efficiency and conservation require the involvement of various state departments such as Industry/MSME, Urban Development, Urban Local Bodies, Public Works, Rural Development, Transport, Agriculture, and DISCOMs. The lack of coordinated efforts across these departments leads to fragmented implementation of energy efficiency programs."
- **5.9** When asked about the expectations of BEE from the Central Government/ Ministry/State Governments regarding achievement of its goals/targets/objectives, the following was submitted:

"To ensure that BEE undertakes effective implementation of energy efficiency and conservation initiatives across the country, the following measures are recommended:

- **a) Organization structure of BEE:** BEE should have an organizational structure in line with similar National/International Organizations and developed into a full-fledged robust entity embedded with necessary expertise of relevant sectors. This would ensure effective management and execution of the expanded scope of activities.
- **b)** Strengthening SDAs through establishment of Standalone SDAs: Encouraging states to establish Standalone SDAs dedicated solely to energy efficiency and conservation. This would provide a focused approach to implementing energy conservation programs and ensure better resource allocation.
- c) State-level review by Chief Secretary: There is a need of instituting a review mechanism where the Chief Secretary of each state periodically reviews the progress of energy efficiency activities and programs.

Considering the multi-disciplinary nature of energy efficiency and conservation, the Chief Secretary's review would ensure the involvement and coordination of various state departments including but not limited to Industry/MSME, Urban Development, Urban Local Bodies, Public Works, Rural Development, Transport, Agriculture, and DISCOMs. This high-level review would facilitate the identification and resolution of interdepartmental challenges, ensuring a cohesive and integrated approach to energy efficiency and conservation efforts at the state level."

#### **C)** Central Power Research Institute (CPRI)

**5.10** The details of budgetary allocation and actual utilization in respect of CPRI, as furnished by the Ministry, are given below:

			(In Rs. Crore)
Year	Budget	Revised	Actual
	Estimates	Estimates	Expenditure
2019-20	200.00	200.00	178.00
2020-21	200.00	80.00	80.00
2021-22	180.00	120.00	120.00
2022-23	302.77	205.00	174.96
2023-24	208.00	150.00	143.95

**5.11** The details regarding physical targets and achievements with respect to CPRI are given below:

Parameters		2021-22		2022-23		2023-24	
P	arameters	Target	Achievement	Target	Achievement	Target	Achievement
Reven	ue (in Rs. Crore)	215	131.39	236.5	179.26	236.5	227.1
Danore	National	100	37	100	29	100	40
Papers	International	135	62	135	79	135	120
Semina	Seminars/Workshops/						
Webi	Webinars/Training		57	75	69	35	88
P	rogramme						
Rese	arch Projects	18	18	18	18	18	19
	Patents	5	8	5	4	5	16
_	al Expenditure n Rs. Crore)	180	160.02	302.77	187.14	208	143.81

**5.12** On being asked about the sufficiency of the funds and measures under-taken by CPRI to ensure full utilization of the allocated amount, the following was furnished:

'The funds allocated to CPRI were sufficient and CPRI was able to utilize a major part of the funds allocated and it was sufficient to carry our

activities. CPRI estimates the fund allocation based on the current progress of the ongoing schemes/projects. While preparing the budget estimate, the following parameters are taken into account:

- a) Purchase orders to be placed;
- b) Letter of credit to be opened;
- c) Part payments to CPWD with respect to civil work;
- d) Balance payments for equipment installed and commissioned;
- e) Outlay of approved Research projects.

Any changes in the figures processes are considered while proposing the Revised Estimate (RE) figures. This ensures that funds are utilized efficiently and adjustments are made to reflect the actual progress and needs of the projects. The above systematic process ensures full utilization of the allocated amount."

**5.13** On being asked about the constraints that CPRI has been facing in achievement of its objectives, the following was stated:

"CPRI being the nodal coordinator carries out/co-ordinates the R&D schemes of MoP by identifying projects on thrust areas leading to new technology development. CPRI is continuously augmenting its test facilities with grant in aid from Ministry of Power to meet the needs of the electrical industry for development of products indigenously and also carries out testing of electrical equipment as per National and International standards.

**Achieving Objectives without Constraints:** CPRI is efficiently managing the affairs with available resources.

**Continuous Augmentation and Support:** With continuous grant-in-aid from the Ministry of Power, CPRI consistently upgrades its test facilities. This support enables CPRI to meet the needs of the electrical industry by developing products indigenously and conducting comprehensive testing of electrical equipment.

**Adherence to Standards:** CPRI ensures that all testing is conducted in accordance with both National and International standards. This commitment guarantees the reliability and safety of electrical equipment and supports the development of high-quality products within the industry."

**5.14** When asked about the expectations of CPRI from the Central Government/ Ministry/State Governments regarding achievement of its goals/targets/ objectives, the following was submitted:

"Global Acceptance of CPRI certificate: Government shall help CPRI in acceptance of its test certificate globally.

**Financial Support:** 100% Grant in Aid from Government of India for all the upcoming capital projects to augment its existing test facilities and establishing new facilities.

**Land Acquisition:** Central/State Government shall help CPRI in allotting land for establishment of new units for expansion of Research and Test facilities."

# D) National Power Training Institute (NPTI)

**5.15** The details of budgetary allocation and actual utilization in respect of NPTI, as furnished by the Ministry, are given below:

			(In Rs. Crore)
Year	BE	RE	Actual Expenditure
2020-21	82.34	25.96	18.45
2021-22	70.00	30.00	16.07
2022-23	50.00	30.00	14.35
2023-24	35.00	35.00	22.94
2024-25	50.00	-	-

**5.16** The details regarding physical targets and achievements with respect to NPTI are given below:

Sl.	Performance	Target	Achieved	Target	Achieved	Target	Achieved
No.	Parameter	2021-22	2021-22	2022-23	2022-23	2023-24	2023-24
1.	No. of Trainees	18,607	15,209	20,000	71,727*	35,818	15,141
2.	Trainee Weeks	77,922	34,502	77,922	52,468	77,922	43,105
	(T-W)						
3.	Revenue	4500	2915.02	4950	7970.46@	6127	9623.66@^
	Earnings						
	(Rs. Lacs) \$						
4.	Excess Revenue	-495.15	-7850.03	745	-462.99	983	1598.91^
	over Expenditure						
	with						
	Depreciation						
	(Rs. Lacs)						

<sup>\*50,262</sup> Girl Students trained under Special Program on Capacity Building on Energy Conservation at various KGBVs in UP State.

**5.17** On being asked about the sufficiency of the funds and measures under-taken by NPTI to ensure full utilization of the allocated amount, the following was furnished:

"The allocation of fund in BE is based on the deliberation of various project proposal in NPTI's Standing Committee & Governing Council

*<sup>\$</sup> including interest earned on investments* 

<sup>@</sup> Including amortization of grants of Rs. 1958.24 Lakhs for FY 2022-23 & Rs. 1470.09 Lakhs for FY 2023-24 (Balance Sheet Schedule 3 &18)

<sup>#</sup> including depreciation

<sup>^</sup> Unaudited

meetings. Accordingly, demand of funds is being raised. Generally, these Standing Committee & Governing Council meetings are having with other agenda items like presentation of Annual Accounts, before & after CAG Audit, performance review etc. for which some time schedule constraints are being faced. RE figures are decided by MoF based on actual expenditure trends and overall budget availability. NPTI, in consultation with T&R Division of MoP are continuously trying to get timely SC & GC meetings to ensure the timely allocation of sufficient funds.

The funds are usually released keeping in view the allocation and demand raised by NPTI supported with the utilization certificate of fund released earlier. In this context, NPTI in consultation with T&R Division of MoP, are taking efforts that the release of fund may be made as per the Fund Flow requirement of the Projects to ensure its timely completion as well as to utilize the sanctioned amount fully. For strengthening of Pension Fund, NPTI requests to release the whole amount in the 1st Quarter of each financial year which is considered as per extant rules/guidelines of MoF."

**5.18** On being asked about the constraints that NPTI has been facing in achievement of its objectives, the following was stated:

"Constraints currently faced by NPTI while achieving its objectives are as follows:

- a) To meet the pressing challenges of Energy Security and Environment, India is putting focus on Renewable Energy Generation; this has greatly impacted NPTI's existing objectives. NPTI is diversifying its area of specialization to work in line with Government's mission, but this will take some time to establish new facilities.
- b) Many CPSUs/PSUs have their own training Institutes due to which existing infrastructure of NPTI is not being fully utilised.
- c) Since inception, NPTI was getting Grant-in-aid from the Ministry but from the FY 2004-05, it was declared as self sustained, which was maintained till 2018. NPTI is getting plan funds from the Ministry of Power, however Non Plan funds may also be provided to NPTI to meet its statutory expenditure."
- **5.19** When asked about the expectations of NPTI from the Central Government/ Ministry/State Governments regarding achievement of its goals/targets/objectives, the following was submitted:

"A methodology may be evolved for NPTI in order to optimally utilise the infrastructure existing and in-house capability including resource personnel empanelled for the power sector in the interest of the country, which will not only benefit the industries/power sector but also may be very beneficial for enhancing the upcoming requirements and related expertise for the growth of the Sector.

NPTI needs financial support to cater to Indian Power Sector requirements which are dynamically changing with technology integration & Energy Transition Path. In this respect, MoP may mandate 1 week refresher training for CPSU's/PSU's employees as already indicated in the National Training Policy of the Power Sector.

In compliance with the National Training Policy (NTP) of Ministry of Power, all organizations need to allocate training budget at least equal to 5% percent of the salary budget exclusively for funding training activities.

NPTI may be made the resource centre of Ministry of Power for Training & capacity Building for entire Indian Power Sector and full funding of training & capacity building (for all schemes under MoP) may be allocated by default under the scheme to NPTI and the same may be directly disbursed to NPTI by MoP.

NPTI will act as training and coordination agency for all schemes under MoP. NPTI will impart the training and also coordinate to engage other training institution in the country as per the requirement of training.

NPTI may be designated as affiliating & regulatory body for the present & new upcoming training institutes in the Indian power sector.

Power sector training in the areas of Smart Power Distribution System, Smart Transmission and Smart Generation including Renewable Energy, Electric Vehicle & Battery Energy Storage system, Carbon Neutrality, Renewable Energy and Microgrid, Green Hydrogen, Energy Transition & Energy Efficiency, SCADA, Smart Grid & Smart Metering (SSS), Ultra Supercritical and Advanced Ultra Supercritical Technologies, Cyber Security & IoT may also be strengthened in coordination with NPTI in order to accommodate emerging areas. This will help prepare competent man power for upcoming Renewable Installations to meet the country's requirement for Vision India @2047.

Since NPTI has huge infrastructure having 11 Institutes, the infrastructure can be effectively utilised by the respective zones/states of the country for not only getting the adequate technology upgradation but also the academic organisations and R&D Institutions can get the benefit of industry association, thus providing training to all the technical workforce/managerial personnel which may include ITIs/Diploma Holders/Engineering Institutes and even Higher Academic Institutes where this type of infrastructure is not available.

NPTI is planning to set up the Centres of Excellence in the following areas:

- a) Data Analytics
- b) Cyber Security
- c) Energy Transition."

#### PART – II OBSERVATIONS/RECOMMENDATIONS OF THE COMMITTEE

#### **Budgetary Allocation for 2024-25**

1. The Committee note that the budgetary allocation for the Ministry of Power is 0.43 % of the total Budget (2024-25) of the Government of India. The Ministry had projected a demand of Rs. 26,083.90 crores, however a sum of Rs. 20,502 crores has been allocated to the Ministry for the Financial Year 2024-25, which is 169.32 crores less than the previous year's allocation. The Committee observe that the Ministry sought Rs. 20,337.66 crores for Revamped Distribution Sector Scheme, but it has been allocated Rs. 12,585 crores for the same. Further, the Ministry did not demand any funds for **Programmes like, North Eastern Region Power System Improvement Project;** Strengthening of Transmission System in the States of Arunachal Pradesh and Sikkim and Support for Flood Moderation Storage Hydro Electric Projects; however Rs. 600.01 crores, Rs. 1315.01 crores and Rs. 449.25 crores have been allocated for these Programmes respectively. There seems to be a mismatch between the priorities of the Ministry and corresponding allocation of funds. The Committee, therefore recommend the Ministry to be estimation of its demands and careful in also ensure that schemes/programmes do not suffer due to lack or under-utilization of allocated funds.

#### **Utilization of Allocated Funds during Previous Years**

2. The Committee note that the Budgetary Estimates of the Ministry for the financial year 2022-23 was Rs. 16,074.74 crores which was revised to Rs. 13,106.58 crores and actual utilization was Rs. 9,312.98 crores. It means actual utilization was 57.94% of the Budgetary Estimates and 71.06% of the Revised Estimates. Nonetheless, the situation improved somewhat during the financial year 2023-24, as the actual utilization was 80.89% of the Budgetary Estimates and 94.82% of the Revised Estimates. During the financial year

2024-25, the Ministry has been able to utilize 60.06% of the Budgetary Estimates as on 30<sup>th</sup> September, 2024. Moreover, the scheduled capacity addition targets with respect to Thermal and Hydro Power could also not be achieved. The Committee feel that such under-utilization of funds and non-achievement of scheduled targets will have an adverse effect on the future budgetary allocation of the Ministry. Therefore, the Committee recommend that the Ministry should ensure optimum utilization of the allocated funds and achievement of scheduled capacity addition targets in a time bound manner.

#### **Allocation for SCs/STs and Tribal Areas**

3. The Committee note that SC Sub-Plan (SCSP), Tribal Area Sub-Plan (TASP) and other Special Component Plans have been introduced in order to ensure direct policy driven benefits for SCs, STs, Tribal Areas and North-Eastern Region Areas. Under these Plans, funds are earmarked for SCs, STs, etc. under separate budget heads for each Ministry of the Government of India. The allocation includes programmes benefitting SC/ST hamlets or designing of new appropriate development programmes. The Committee understand that the Schemes/Programmes which are being implemented by the Ministry are more centered around development of infrastructure, rather than being completely individual centric. Nonetheless, the Committee recommend that the Ministry should focus on maximum utilization of funds allocated for Scheduled Castes, Scheduled Tribes and other Socially Backward Groups as per the mandated requirement so that these groups get included in the development process of the Power Sector.

# Revamped Distribution Sector Scheme (RDSS)

4. The Committee note that the Revamped Distribution Sector Scheme (RDSS) has been formulated with the objective of improving the quality and reliability of power supply to consumers through a financially sustainable

and operationally efficient distribution sector and it aims to reduce the AT&C Losses at pan-India level to 12-15% and Average Cost of Supply (ASC)-Average Revenue Realized (ARR) Gap to zero. The Scheme has an outlay of Rs. 3,03,758 crores with a Gross Budgetary Support of Rs. 97,631 crores from the Government of India over a period of five years from Financial Year 2021-22 to 2025-26. The Committee observe that a total of Rs. 17,400 crores (Revised Estimates) have been allocated for Revamped Distribution Sector Scheme during the first 3 years of this Scheme i.e. from the Financial Year 2021-22 to 2023-24. Out of this allocation, Rs. 13,616 crores could actually be utilized during these years i.e. 78.25% of the allocation. For 2024-25, Rs. 12,585 crores have been allocated for this Scheme, out of which, Rs. 8517.38 crores have been utilized as on 30th September, 2024. The Committee feel that utilization of funds under Revamped Distribution Sector Scheme has been sub-optimal. The Committee further observe that around 51% of the sanctioned smart meters and 75% of the sanctioned infrastructure works have been awarded; however, only 12% of the overall physical progress has been achieved till date and the balance works are under different stages of tendering process. Since only about 16 months are left as the sun-set date for this Scheme is 31st March, 2026; the Committee recommend that the Ministry should expedite the implementation of the Revamped Distribution Sector Scheme so that stipulated targets are achieved within the given timeline.

#### **Household Electrification**

5. The Committee note that under Deen Dayal Upadhyay Gram Jyoti Yojana (DDUGJY) and thereafter, under Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA), all the States declared all the inhabited un-electrified census villages across the Country, as electrified on 28<sup>th</sup> April, 2018 and all willing households as electrified on 31<sup>st</sup> March, 2019. While a total of 18,374 villages were electrified under DDUGJY, a total of 2.86 crore households were electrified under the aegis of SAUBHAGYA. The Committee highly appreciate

the fact that the Government of India stands committed to support all the States for electrification of households. Thus, electrification work of 8,00,552 left out households under SAUBHAGYA; 1,29,269 identified Particularly Vulnerable Tribal Group (PVTG) households under PM-JANMAN; 2,837 households located in remote, hilly and border areas identified under Vibrant Village Program and 3,030 households under Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DAJGUA), have been taken up under Revamped Distribution Sector Scheme. While applauding the Ministry for taking up the work related to electrification of a total of 9,35,688 households in various States of the Country, the Committee recommend that electrification of these households should be done on mission mode so that these households get electrified by the sun-set date of Revamped Distribution Sector Scheme i.e. 31st March. 2026.

#### Aggregate Technical & Commercial (AT&C) Losses

6. The Committee note that there is reduction in National Level AT&C Losses from the level of 27.8% during the year 2008-09 to 15.37% in the year 2023. However, AT&C Losses have increased for the States of Jharkhand, Maharashtra, Mizoram and Telangana during the last 5 years. Further, Arunachal Pradesh, Chhattisgarh, Gujarat (Uttar Gujarat Vij Company Limited and Paschim Gujarat Vij Company Limited), Jharkhand, Madhya Pradesh (MP-West), Maharashtra (MSEDCL), Mizoram, Nagaland, Puducherry, Sikkim and Tripura have reduced their losses, but were not able to meet the targets for AT&C Losses in the year 2023. The Committee feel that increase in AT&C Losses in the States like, Maharashtra and Telangana is a cause for concern as this trend may hamper the reduction of AT&C Losses in the Country to the level of 12-15% by the stipulated date. The Committee, therefore, recommend that the Ministry should take this matter up with the concerned States/DISCOMs so as to avoid further deterioration of the condition related to AT&C Losses in these States.

#### **Smart Meters**

- 7. The Committee note that a Smart Meter is an advanced version of Electronic Meter with two way communication and remotely operated connect/disconnect switch inside the meter. The main objective of Smart Metering is to enable near real time two-way communication between Smart Meter and Data Centre so as to enable remote reading, monitoring and control of meters at the consumer end. Revamped Distribution Sector Scheme envisages the installation of 25 crore Smart Meters by the year 2025-26. The Committee also note that 130.94 lakh Smart Meters have been installed in the Country so far. Considering the present pace of installation of Smart Meters, the target of installation of 25 crore Smart Meters by the year 2025-26 seems to be a difficult task. The Committee feel that there is an urgent need to create awareness about Smart Meters among the masses as support of the people is of utmost importance in making implementation of a Programme successful. The Committee, therefore recommend that:
  - i) The Ministry should closely monitor the progress of the work related to installation of Smart Meters and take prompt remedial action on various complaints and other related issues so that targets set in this regard are achieved without any delay.
  - ii) Awareness Programme, preferably in vernacular language, should be initiated in order to enhance awareness for adoption of Smart Meters at the consumer level.

# **Strengthening of Power System**

8. The Committee appreciate that two Projects/Schemes have been initiated for strengthening of Transmission and Distribution Infrastructure in North-Eastern States of the Country *viz.* 'North Eastern Region Power System Improvement Project (NERPSIP)' which aims to strengthen the Intra-State Transmission and Distribution Infrastructure in six States of North Eastern Region (Assam, Meghalaya, Manipur, Mizoram, Nagaland and Tripura) and

'Comprehensive Scheme for Strengthening of Transmission and Distribution System in Arunachal Pradesh and Sikkim'. The Committee observe that the 'North Eastern Region Power System Improvement Project' got the approval of the Government in December 2014 and it is expected to get completed in December 2024. The estimated cost for this Project was Rs. 5,111.33 crores which has been revised to Rs. 6,700 crores in December 2020 i.e. a cost 31.08%. Similarly, the 'Comprehensive escalation of Scheme for Strengthening of Transmission and Distribution System in Arunachal Pradesh and Sikkim' got the approval of the Government in October 2014 and it is expected to get completed in March 2025. The estimated cost for this Project was Rs. 4,754.42 crores which has been revised to Rs. 9,129.32 crores in March 2021 i.e. a cost escalation of whopping 92.02%. The Committee feel that some time and cost escalations in these Projects may be attributed to difficult geographical conditions in the Region, but such a high cost escalation can not be justified. The Committee, therefore recommend that the Ministry should ensure that these Projects get completed within their targeted schedule in order to avoid any further cost overrun.

# **Central Electricity Authority (CEA)**

9. The Committee note that the Central Electricity Authority is a Statutory Organization originally constituted under Section 3(1) of the repealed Electricity (Supply) Act, 1948 since substituted by Section 70 of the Electricity Act, 2003. It plays an important role in development of Hydro Power Projects in the Country. The Committee observe that Central Electricity Authority has proposed the establishment of a Single Window Cell with officers from Central Water Commission (CWC), Geological Survey of India (GSI) and Central Soil and Materials Research Station (CSMRS) in order to streamline the concurrence process for Hydro Projects. Recognizing the need to provide a push to the Hydro Sector, the Committee recommend that the Ministry

should consider the feasibility of creation of such Single Window Cell in order to expedite the development of Hydroelectric Projects in the Country.

# **Bureau of Energy Efficiency (BEE)**

- **10**. The Committee note that the Bureau of Energy Efficiency could utilize only Rs. 77.16 crores, against the Budgetary Estimates of Rs. 197.82 crores and Revised Estimates of Rs. 145 crores during the Financial Year 2022-23. It means the expenditure was 39% of the Budgetary Estimates and 53.21% of the Revised Estimates. Out of the un-spent balance of Financial Year 2022-23, Rs. 56.92 crores were revalidated for expenditure during 2023-24. The Committee feel that the budgetary utilization by the Bureau of Energy Efficiency is not up to the mark. Further, the Committee observe that energy efficiency and energy conservation activities undertaken during the year 2022-23, have resulted into total electrical savings of 306.55 Billion Units, total annual energy savings of 50.98 Million Tonnes of Oil Equivalent i.e. 6.65% of total primary energy supply of the Country, total annual cost savings worth Rs. 1,94,320 crores approximately, equivalent reduction in CO<sub>2</sub> emissions of around 306.40 Million Tonnes annually, etc. Appreciating the positive impact of energy efficiency and energy conservation activities in terms of saving of electrical energy and cost, the Committee recommend that:
  - i) The Bureau of Energy Efficiency should gear itself up to ensure optimum utilization of the allocated amount. This requires greater efforts and better dynamism.
  - ii) The Ministry should encourage all the States to establish Standalone State Designated Agencies (SDAs) dedicated solely to energy efficiency and conservation in order to provide a focused approach to implementation of energy conservation programs.

#### **Central Power Research Institute (CPRI)**

11. The Committee note that the Central Power Research Institute serves as a National Testing and Certification Authority for the purpose of certification of rating and performance to ensure availability of quality equipment for use under conditions prevalent in Indian Power Systems. It carries out testing and certifications for Distribution and Power Transformers, Switch Gear & Control Gears, Energy Meters and Smart Meters, Isolators, Lightning Arrestor, Capacitors, Cables and Conductors, Transmission Line Towers, Transformer Oil, LED etc. However, it has been submitted before this Committee that the certificates from Central Power Research Institute lack global acceptance. The Committee, therefore recommend that the Ministry should help Central Power Research Institute in this regard and take necessary action to ensure acceptance of its test certificates globally.

### **National Power Training Institute (NPTI)**

**12**. The Committee note that the National Power Training Institute was allocated an amount of Rs. 50 crores at the time of Budgetary Estimates during the year 2022-23, which was reduced to Rs. 30 crores at the time of Revised Estimates. Against this allocation, the actual utilization was only Rs. 14.35 crores i.e. 28.70% of the Budgetary Estimates and 47.83% of the Revised Estimates. Similarly, the Institute was allocated an amount of Rs. 35 crores at the time of Budgetary Estimates during the year 2023-24, which remained same at the time of Revised Estimates and it could utilize Rs. 22.94 crores i.e. 65.54% of the Budgetary/Revised Estimates. The Committee feel that actual utilization of the budgetary allocations by the National Power Training Institute has been sub-optimal. The Committee were apprised that the Institute used to get Grant-in-Aid from the Ministry since its inception, but from the year 2004-05, it was declared as self sustained, which was maintained till 2018. Keeping in view the sub-optimal utilization of allocated funds by the National Power Training Institute and the fact that the Institute was self-sufficient for a long period of time and then it lapsed into dependence in 2018, the Committee recommend that the Ministry should take steps to ameliorate the reasons responsible for non-utilization of allocated funds by the Institute so that its funds absorptive capacity gets increased. The Committee would also like to be apprised about the steps taken by the Institute to regain its status of self sufficiency.

New Delhi 3<sup>rd</sup> December, 2024 12 Agrahayana, 1946 (Saka) Shrirang Appa Barne Chairperson, Standing Committee on Energy

#### **STANDING COMMITTEE ON ENERGY**

# MINUTES OF SECOND SITTING OF THE STANDING COMMITTEE ON ENERGY (2024-25) HELD ON 15<sup>th</sup> OCTOBER, 2024 IN COMMITTEE ROOM-3, PARLIAMENT HOUSE ANNEXE EXTENSION, NEW DELHI

The Committee sat from 1100 hours to 1330 hours

#### **MEMBERS - LOK SABHA**

#### Shri Shrirang Appa Barne - Chairperson

- 2. Shri Shyamkumar Daulat Barve
- 3. Shri Jagadish Chandra Barma Basunia
- 4. Shri Devusinh Chauhan
- 5. Shri Shahu Shahaji Chhatrapati
- 6. Shri Chandra Prakash Joshi
- 7. Dr. Shivaji Bandappa Kalge
- 8. Dr. Kirsan Namdeo
- 9. Shri Dulu Mahato
- 10. Shri Ramprit Mandal
- 11. Smt. Bijuli Kalita Medhi
- 12. Shri Jagdambika Pal
- 13. Shri Kunduru Raghuveer
- 14. Smt. Shambhavi
- 15. Shri Chandubhai Chhaganbhai Shihora
- 16. Dr. Shrikant Eknath Shinde
- 17. Shri Abhay Kumar Sinha

# **MEMBERS - RAJYA SABHA**

- 18. Shri Birendra Prasad Baishya
- 19. Shri N. R. Elango
- 20. Shri Javed Ali Khan
- 21. Shri Harsh Mahajan

#### **SECRETARIAT**

1.	Shri Ramkumar Suryanarayanan	Joint Secretary
2.	Shri Kulmohan Singh Arora	Director

	WITNESSES					
	MINISTRY OF POWER					
1	Shri Pankaj Agarwal	Secretary				
2	Shri Srikant Nagulapalli	Additional Secretary & Director General, BEE				
3	Shri Mahabir Prasad	Joint Secretary & Financial Advisor				
4	Dr. D. Sai Baba	Joint Secretary				
5	Shri Piyush Singh	Joint Secretary				
6	Shri Mohammad Afzal	Joint Secretary				
7	Shri Shashank Misra	Joint Secretary				
		CTRICITY AUTHORITY				
8	Shri Ghanshyam Prasad	Chairperson				
	PSUs/AUTONOMOUS	BODIES/STATUTORY BODIES				
9	Smt. Parminder Chopra	CMD, PFC Limited				
10	Shri R. K. Tyagi	CMD, PGCIL				
11	Shri Raj Kumar Chaudhary	CMD, NHPC Limited				
12	Shri Sushil Sharma	CMD, SJVNL				
13	Shri R. K. Vishnoi	CMD, THDC India Limited				
14	Shri S. R. Narasimhan	CMD, Grid Controller of India Limited				
15	Shri S. Suresh Kumar	Chairman, DVC				
16	Shri Manoj Tripathi	Chairman, BBMB				
17	Shri B. A. Sawale	Director General, CPRI				
18	Dr. Tripta Thakur	Director General, NPTI				
19	Shri Harsh Baweja	Director, REC Limited				
20	Shri K. Shanmugha Sundaram	Director (Projects), NTPC Limited				
	Kothandapani					
21	Shri Ranendra Sarma	Director (Technical), NEEPCO				
22	Shri Baidyanath Maharana	Director (Finance), NEEPCO				

- 2. At the outset, the Hon'ble Chairperson welcomed the Members of the Committee and representatives of the Ministry of Power, Central Electricity Authority and concerned CPSUs, Autonomous Bodies and Statutory Bodies to the Sitting and informed that the Sitting had been called for evidence in connection with examination of the Demands for Grants (2024-25) of the Ministry. The Hon'ble Chairperson also apprised them about the provisions of Directions 55(1) and 58 of the Directions by the Hon'ble Speaker.
- **3.** During the discussion, a power-point presentation was made on the subject which, *inter-alia*, covered information about Segments of the Electricity Sector; Statutory Framework; Organizations under the Ministry of Power; Major Achievements of the Ministry of Power, Impact of Energy Efficiency Interventions;

Budget; Budgetary Allocation and Actual Expenditure; Details of CAPEX Targets of CPSEs of the Ministry of Power from Financial Year 2020-21 to Financial Year 2024-25; Revamped Distribution Sector Scheme; Transmission Schemes; New Schemes in Financial Year 2024-25; etc.

- **4.** The Committee, *inter-alia*, deliberated upon the following points with representatives of the Ministry of Power, Central Electricity Authority and concerned CPSUs, Autonomous Bodies and Statutory Bodies:
  - i) Reasons for under-utilization of funds specially during last two financial years i.e. 2022-23 and 2023-24;
  - ii) Need for the Ministry to improve its absorptive capacity in spending budgeted funds and achieve the stipulated targets;
  - iii) Reasons for sub-optimal utilization of budgeted funds under Revamped Distribution Sector Scheme;
  - iv) Need to achieve the targets set under Revamped Distribution Sector Scheme within its stipulated deadline i.e. 31<sup>st</sup> March, 2026;
  - v) Expected timeline for commissioning of 2000 MwH of Storage Capacity under the Scheme 'Viability Gap Funding' for the development of Battery Energy Storage Systems;
  - vi) Policy interventions and financial assistance provided by the Government of India for Pumped Storage Projects and Large Hydro Projects;
  - vii) Reasons for delay in formulation of New National Electricity Policy;
  - viii) Physical and financial performance of Central Electricity Authority, National Power Training Institute and Central Power Research Institute:
  - ix) Issues related to Smart Metering;
  - x) Issues related to Transmission and AT&C Losses;
  - xi) Issues related to DISHA and District Electricity Committees;
  - xii) Issues related to Subansiri Lower Hydro-electric Project and Dibang Valley Project;
  - xiii) Issues related to Environmental Impact Assessment and related Relief and Rehabilitation Measures;
  - xiv) Need for One Nation-One Tariff;
  - xv) Issues related to Damodar Valley Corporation, Maithon Power Plant and Chandrapura Power Station;
  - xvi) Issues related to declining Plant Load Factor;
  - xvii) Budget allocated for Scheduled Caste and Scheduled Tribe Categories;
  - xviii) Need to build Climate Resilient Infrastructure;
  - xix) Issues related to bringing Power under GST;
  - xx) Issues related to Household Electrification;
  - xxi) Issues related to Fly Ash.

5. The Members also sought clarifications on various other issues relating to the subject and representatives of the Ministry and concerned Organizations responded to the same. The Committee directed the representatives to furnish written replies to all those queries which could not be fully responded to within 10 days of the Sitting.

The Committee then adjourned.

The verbatim proceedings of the sitting have been kept for record.

### **STANDING COMMITTEE ON ENERGY**

# MINUTES OF FOURTH SITTING OF THE STANDING COMMITTEE ON ENERGY (2024-25) HELD ON 3<sup>rd</sup> DECEMBER, 2024 IN COMMITTEE ROOM-D, PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee sat from 1500 hours to 1530 hours

#### **MEMBERS - LOK SABHA**

	MEMBERS BOX	SHEIM				
	Shri Shrirang Appa Barn	e - Chairperson				
2.	Shri Shyamkumar Daulat Barve					
3.	Shri Jagadish Chandra Barma Basunia					
4.	Shri Devusinh Chauhan					
5.	Shri Shahu Shahaji Chhatrapati					
6.	Captain Brijesh Chowta					
7.	Shri Malaiyarasan D.					
8.	Dr. Kirsan Namdeo					
9.	Shri Nilesh Dnyandev Lanke					
10.	Shri Dulu Mahato					
11.	Shri Ramprit Mandal					
12.	Smt. Bijuli Kalita Medhi					
13.	Shri Jagdambika Pal					
14.	Shri Kunduru Raghuveer					
15.	Smt. Shambhavi					
16.	Shri Chandubhai Chhaganbhai Shihor	a				
17.	Smt. Dimple Yadav					
	MEMBERS - RAJY	A SABHA				
18.	Shri Gulam Ali					
19.	Shri Ajit Kumar Bhuyan					
20.	Shri R. Dharmar					
21.	Shri N.R. Elango					
22.	Shri Javed Ali Khan					
23.	Shri Harsh Mahajan					
24.	Smt. Mamata Mohanta					
	SECRETARI	AT				
1.	Shri Ramkumar Suryanarayanan	Joint Secretary				
2.	Shri Kulmohan Singh Arora	Director				
3.	Ms. Deepika	<b>Under Secretary</b>				

- **2.** At the outset, the Chairperson welcomed the Members of the Committee and apprised them about the agenda of the sitting. The Committee then took up for consideration and adoption the following draft Reports:
  - (i) Report on Demands for Grants (2024-25) of the Ministry of Power.
  - (ii) Report on Demands for Grants (2024-25) of the Ministry of New and Renewable Energy.
- **3.** After discussing the contents of the Reports in detail, the Committee adopted the abovementioned two draft Reports without any amendment/ modification.
- **4.** The Committee authorized the Chairperson to finalize the above-mentioned Reports and present the same to both the Houses of the Parliament during the current session.

*The Committee then adjourned.* 

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