14 STANDING COMMITTEE ON ENERGY

(2020-21)

SEVENTEENTH LOK SABHA

MINISTRY OF POWER

[Action-taken by the Government on the recommendations contained in the Second Report (17th Lok Sabha) on Demands for Grants of the Ministry of Power for the year 2019-20]

FOURTEENTH REPORT

LOK SABHA SECRETARIAT
NEW DELHI

March, 2021/ Phalguna, 1942 (Saka)

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Presented to Lok Sabha on 19.03,2021

Laid in Rajya Sabha on 19.03.2021

LOK SABHA SECRETARIAT
NEW DELHI

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COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2020-21)

Shri Rajiv Ranjan Singh *alias* Lalan Singh - *Chairperson*

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3 Shri Gurjeet Singh Aujla
4 Shri Chandra Sekhar Bellana
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29 Shri K.T.S. Tulsi
30 *Vacant
31 #Vacant

SECRETARIAT

1	Shri R.C. Tiwari	Joint Secretary
2.	Shri R.K. Suryanarayanan	Director
2.	Smt. L.Nemjalhing Haokip	Deputy Secretary

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^ *Nominated as Member of the Committee w.e.f. 28.12.2020*

** Vacant vice Shri Javed Ali Khan, retired from Rajya Sabha on 25.11.2020.*

 # Vacant since constitution of the Committee w.e.f. 13.09.2020

INTRODUCTION

I, the Chairperson, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this Fourteenth Report on the action taken by the Government on the recommendations contained in Second Report of the Standing Committee on Energy on Demands for Grant (2019-20) of the Ministry of Power.

2. The Second Report was presented to the Lok Sabha on 6th December, 2019 and was laid in Rajya Sabha on the same day. Replies of the Government to all the recommendations contained in the Report were received on 22nd June, 2020.

3. The Report was considered and adopted by the Committee at their sitting held on 18th March, 2021

4. An Analysis on the Action Taken by the Government on the recommendations contained in the Second Report of the Committee is given at Appendix-II.

5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

NEW DELHI
18th March, 2021
Phalguna 27, 1942 (Saka)

Rajiv Ranjan Singh *alias* Lalan Singh,
Chairperson,
Standing Committee on Energy

CHAPTER- I

This Report of the Standing Committee on Energy deals with the action taken by the Government on the Recommendations/Observations contained in the Second Report (Seventeenth Lok Sabha) on Demands for Grants of the Ministry of Power for the year 2019-20.

2. The Second Report was presented to Lok Sabha on 6th December, 2019 and was laid on the Table of Rajya Sabha on the same day. The Report contained 16 Recommendations/Observations. Action-taken notes in respect of all the Recommendations/Observations contained in the Report have been received from the Government. These have been categorized as follows:

(i) Recommendations/Observations which have been accepted by the Government:

Serial Nos.1, 2, 5, 6, 7, 8, 9, 10, 11,12, 13, 14, 15 and 16 — Total - 14 Chapter-II

(ii) Recommendation/Observation which the Committee do not desire to pursue in view of the Government's replies:

Nil — Total - 00 Chapter-III

(iii) Recommendations/Observations in respect of which the replies of the Government have not been accepted by the Committee and which require reiteration:

Serial Nos. 3 and 4 — Total– 02 Chapter-IV

(iv) Recommendation/Observation in respect of which the final replies of the Government are still awaited:

Nil — Total - 00 Chapter-V

3. The Committee observe that the 2nd Report of the Committee on Demands for Grant of the Ministry of Power for the year 2019-20 was presented to Parliament on 6th December, 2019 and the Ministry of Power was required to submit the action taken replies thereon within a period of 03 months i.e. by 5th March, 2020. The Committee however observe that the action taken replies on the Report have been submitted by the Ministry on 22nd June, 2020. The Committee therefore advise the Ministry to strictly follow the time schedule prescribed for the submission of the replies on the Reports of the Committee

in future. The Committee further desire that the Action-taken statement on the Observations/Recommendations contained in Chapter-I of this Report may be furnished to the Committee within a period of three months from the presentation of this Report.

4. The Committee will now deal with action taken by the Government on some of their Recommendations that require reiteration or merit comments.

(Recommendation No. 3)

5. The Committee had recommended/observed as under:

> "The Committee note that there is an elaborated monitoring mechanism under DDUGJY to ensure its proper implementation. At State level, a Committee under the Chairmanship of Chief Secretary is in place to monitor progress and resolve issues relating to implementation viz. allocation of land for sub-stations, right of way, forest clearance, railway clearance, safety clearance etc. At District level, District Development Co-ordination & Monitoring Committee namely DISHA (administered by Ministry of Rural Development) headed by senior most Member of Parliament (Lok Sabha) is in place to review and monitor implementation of central sector schemes including DDUGJY. At Central level, Inter-Ministerial Monitoring Committee on DDUGJY headed by the Secretary, Ministry of Power, Government of India also monitors implementation of scheme. Besides, progress is also reviewed with States/Power Utilities in Review, Planning and Monitoring (RPM) meeting of Ministry of Power. REC Limited, the nodal agency, monitors implementation of scheme through its Project Offices at field level. The Project Management Agency (PMA) appointed by Project Implementing Agencies (PIAs) assists them in implementation of projects in such activities which involves formulation of Detailed Project Report (DPRs), award of works, monitoring the progress, quality monitoring etc.
>
> Despite all these mechanism in place, the Committee have been receiving feedback through Members of Parliament about the poor quality of work being done at the ground level. The main complaint in this regard is that despite pointing out to the poor quality of work, hardly any remedial measure is taken. The Committee, therefore, recommend that the Ministry should keep track of the meetings of the DISHA and get report/feedback on matters discussed therein pertaining to electricity sector especially schemes such as DDUGJY and IPDS. The Committee also expect the Ministry to take prompt and sincere action on such issues under intimation to the respective Member of Parliament."

6. The Ministry of Power, in its Action -taken reply, has recommended/observed as under:

> "As per the Quality Assurance Mechanism established under the scheme, at first level; State Power Utilities carryout necessary quality checks

including pre-despatch inspection of materials as well as quality of erection works in the field. At second level, the Nodal agency, REC Limited has also been entrusted with the responsibility to carryout pre-despatch quality inspection of materials and erection works in villages on random sample basis through third party agencies designated as REC Quality Monitoring Agencies (RQMs). The defects notified by quality monitoring agencies are forwarded to Project Implementing Agencies for rectification & corrective measures.

The status of quality assurance is regularly reviewed by the nodal agency and the Ministry with the States / Power Utilities and necessary directions are issued from time to time in order to further improve the quality of materials as well as quality in erection works.

Apart from aforesaid Quality Assurance Mechanism, Ministry of Power, through REC, has imparted trainings to the frontline supervisors of State Power Utilities, Turnkey Contractors & Project Implementing Agencies (PIA) to improve quality of the works being executed under DDUGJY. In order to enforce quality in the DDUGJY works, payment to the PIAs is linked with defect rectification and other quality compliances.

In case of complaints from Public Representatives, a Committee/Team consisting of officials from REC, State Power Utilities, Project Implementing Agencies, Quality Monitors etc.,is constituted to enquire into the matter and ensure redressal of the concerns raised."

7. The Committee observe from the reply submitted by the Ministry that under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) Scheme, Quality Assurance Mechanism is established at various levels, carrying out necessary quality checks including pre-despatch inspection of materials as well as quality of erection works in the field and that the Nodal agency, REC Limited has been entrusted with the responsibility to carry out pre-despatch quality inspection of materials and erection works. The Committee are also informed that the status of quality assurance is regularly reviewed and that necessary directions from the Ministry are issued from time to time in order to further improve the quality of materials as well as quality in erection works. The Committee also note that in order to address the complaints from public representatives regarding poor quality of work under DDUGJY, the Ministry has reportedly constituted a Committee/Team consisting of officials from the REC, State Power Utilities, Project Implementing Agencies, Quality Monitors etc., to enquire into the matter and ensure redressal of the concerns raised. The Committee in their original report had specifically recommended that the Ministry should keep track of the meetings of DISHA and get report/feedback

on matters discussed therein pertaining to the electricity sector especially schemes such as DDUGJY and IPDS. The Committee had also expected the Ministry to take prompt and sincere action on such issues under intimation to the respective Member of Parliament. The Committee however observe that the action taken reply of the Ministry is silent on both these issues though various other measures taken by them have been elaborated.

While the Committee acknowledge the efforts of the Ministry in ensuring proper implementation of DDUGJY, they would like to reiterate their recommendation that the Ministry should keep track of the meetings of DISHA along with other Committees/Teams and get report/feedback quickly on matters discussed pertaining to electricity sector especially DDUGJY and Integrated Power Development Scheme (IPDS). The Committee would like to impress upon the Ministry to take prompt and sincere action on the issues and complaints made by the Members of Parliament and also to keep apprised the respective Member of Parliament of the action taken.

(Recommendation No.4)

8. The Committee had recommended/observed as under :

> "The Committee note with satisfaction that Pradhan Mantri Sahaj Bijli Har Ghar Yojana- Saubhagya, a scheme to achieve universal household electrification by providing last mile connectivity and electricity connection to all remaining un-electrified households in rural and urban areas, has been a great success. All States declared electrification of all households as on 31st March, 2019 except 18,734 households in Left Wing Extremist (LWE) affected areas of Chhattisgarh. Since launch of Saubhagya, 2.63 crore households were electrified across the country up to 31st March, 2019. The Committee, considering the scale of work and the limited time period, feel that it was indeed a herculean task. The Committee appreciate the Ministry for taking this much needed initiative and also accomplishing it in a time bound manner. This scheme has special significance for this Committee as they have since long been persuading the Government to focus on electrification of all households instead of declaring a village electrified by providing electricity connection to households as few as 10% of that village.
>
> The Ministry have stated that subsequently seven States namely Assam, Chhattisgarh, Jharkhand, Karnataka, Manipur, Rajasthan and Uttar Pradesh reported that there are 19.09 lakh un-electrified households which were earlier un-willing, and now willing to get electricity connection, identified before 31stMarch, 2019. The Ministry have further informed that States have been asked to electrify these household under Saubhagya by 31st December, 2019. It is also stated that out of these, 3.44 lakh households, have been electrified up to 27th September, 2019.

The Committee do understand that electrification of household is an ongoing process, however, the number of 'unwilling' households is too large to be a regular affair. This figure also vindicates the apprehension of this Committee that a sizeable number of households were left out of the scheme for whatever reasons. The Committee expect that the Ministry would carry on the good work without slowing down its pace. The Committee, recommend that all the left out/now willing households be electrified within the targeted date of 31stDecember, 2019. The Committee also expect that the Ministry of Power with the help of State Government would run awareness programme and encourage people to get electricity connection under the scheme."

9. The Ministry of Power, in its Action-taken reply, has stated as under:

"The progress on household electrification is reviewed regularly by the nodal agency and the Ministry and the States / Power Utilities are advised to expedite the progress by promptly resolving the issues hampering the progress. Out of 19.09 lakh un-electrified households which were earlier un-willing and now willing to get electricity connection, 9.85 lakh households have been electrified up to 31.12.2019.

The matter has also been reviewed in the Review, Planning and Monitoring meeting with all States / Power Utilities held on 9th -10th January, 2020 and all concerned States / Power Utilities have been advised to accelerate the pace of releasing electricity connections to the remaining households to ensure electrification of all willing households at the earliest."

10. The Committee note from the reply submitted by the Ministry of Power that out of 19.09 lakh un-electrified households which were earlier un-willing and now willing to get electricity connection, 9.85 lakh households have only been electrified up to 31.12.2019. It is thus observed that as on 31.12.2019, 9.24 lakh households were yet to be electrified. The aim of the Government under Pradhan Mantri Sahaj Bijli Har Ghar Yojana – Saubhagya, was to electrify all un-electrified household in the country by 31st December, 2019 but unfortunately a sizeable number of households were left to be electrified by the target date. The Committee therefore, would like to reiterate that all the willing households not covered earlier, need to be electrified in a time bound manner so that the target of universal household electrification is realized in a fruitful manner. The Committee observe that with regard to their recommendation that the Ministry of Power should run awareness programme with the help of State Governments and encourage people to get electricity connection under the scheme, the Ministry has not mentioned anything about the action taken thereon by them. The Committee would therefore reiterate their recommendation that the government need to run awareness programme

by involving the State Governments with a view to encourage all households not so far electrified, to get electricity connection under the scheme at the earliest. The Committee may be apprised of the progress in the matter.

(Recommendation No.8)

11. The Committee had recommended/observed as under :

"The Committee note that India has been participating as one of the leading party in the Conference of Parties (COP) under the United Nations Framework Convention on Climate Change (UNFCCC). The twenty-first session of the COP that took place in 2015 at Paris reached a landmark agreement called "Paris Agreement" to combat climate change. The aim of the Paris Agreement is to strengthen the global response to the threat of climate change by keeping the global temperature rise well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degree Celsius. The Government of India has submitted its Nationally Determined Contributions (NDCs) to UNFCCC in 2015, endorsing country's ambitious commitment towards the issues to climate change and ratified it in the year 2016.

In this scenario, the Committee feels that the role of BEE has become very crucial in implementation of various energy efficiency and conservation programmes. To fulfill this commitment, more energy efficiency measures have to be taken. However, the Committee also believe that irrespective of that commitment, expansion and intensification of energy efficiency is in the interest of the Country. Energy Efficiency Programmes are not only beneficial from environment perspective but also a profitable business as it leads to reduction in energy cost. The Committee find that the energy efficiency programs being run by BEE are relevant and quite effective and the saving caused by them in terms of energy and cost, is astonishing. Though remarkable achievements have been made under these programmes, the Committee are of the belief that there is still great potential in the field of energy efficiency. The Committee, therefore, recommends that Energy Efficiency Programmes should further be expanded and intensified."

12. In its Action-taken replies, the Ministry of Power has stated as under :

"India ratified the Paris Agreement on Climate Change in 2016 under which its member countries have given commitments to make efforts in order to keep global average temperatures rise below 2 degree Celsius. India in its Nationally Determined Contributions (NDCs) has committed that it will reduce the emission intensity of its GDP by 33% to 35% by 2030 from 2005 level. To achieve the above, it would be necessary to continue with its ongoing interventions and enhance the existing policies."

2. As per the study commissioned by BEE, while emphasizing on the energy savings in each of the demand sectors, emission reduction is possible through adoption of energy-saving practices, use of novel technologies and

better enforcement of existing policy and programmes. It is envisaged that due to implementation of various energy efficiency measures, savings of 438 to 623 Million Tonnes of CO_2 can be achieved by 2030 in the moderate and ambitious scenario respectively, which will be approximately 50% to 60% of the total energy related emission reductions.

3. In order to achieve above, BEE is planning to undertake following new initiatives with an overall objective to reduce the energy intensity of the country:

S.No.	Initiative	Action to be taken
I	Optimize cooling related energy consumption	India is one of the fastest major growing economies of the world. The present AC penetration is only 7% in the households and is poised to increase to over 20% by 2030. Moreover, with rapid industrialization, urbanization, increase in per capita income of the people, the cooling demand is bound to increase in a significant way. India is ready to take this challenge, by optimizing the cooling demand, using efficient and climate friendly technologies to tackle this growth.
II	Adoption of energy conservation building code by ULBs	The updated version of the Energy Conservation Building Code (ECBC) was launched in 2017 and till date 15 States / UTs have notified the same. For effective implementation of ECBC, it is necessary to incorporate in the municipal bye laws. Post Notification of ECBC in States, the bye laws will be amended to incorporate ECBC provisions and then gradually adoption and enforcement of ECBC compliance will be taken up by ULBs.
III	Widen and deepen PAT scheme	Coverage of PAT scheme for sectors such as Glass, Ceramic, Chemicals, Mining & Non-Ferrous Metals (Copper/Zinc) are being considered. Industrial sector coverage under the programme is over 60% with a target to reach 75% by 2024 – 25. Energy Intensive sectors like Iron & Steel, Thermal Power Plants, Refineries, Petrochemical to save 21 million TOE.
IV	Adoption of energy efficiency in MSMEs	MSME sector to be new focus area with schemes to deploy energy efficient technologies in process – Cold Chain sector to be one of the key area.
V	Transport sector fuel consumption to be minimized through fuel efficiency norms for Passenger Cars, HDVs and LCVs.	Transport sector consumption to be minimized by prescribing fuel efficiency norms for Passenger Cars, Heavy Duty Vehicles (HDVs), Light Commercial Vehicles (LCVs) and Tractors.

4. Additionally, BEE has proposed to merge its existing programmes/ schemes along with the new initiatives under a revised mission on enhanced energy efficiency i.e. “Roadmap of Sustainable and Holistic Approach to National Energy Efficiency (ROSHANEE)”. The revised mission has a broader vision and takes into account all the potential areas of energy efficiency in various sectors, covering the macro level in policy and further delineating the respective schemes. The revised mission includes the ongoing activities of

BEE that have contributed significantly towards enhancing energy efficiency in all the sectors of the economy along with CO_2 mitigation. The revised programme also has a dedicated component for facilitating financing of energy efficiency activities in India. It also targets the industrial sector in entirety ranging from large to small and medium enterprises. It also deals with the subject of Demand Side Management. It clearly outlines the strategies that need to be adopted for achieving India's Nationally Determined Contribution commitments.

5. Through the ROSHANEE document, NMEEE (existing National Mission for Enhanced Energy Efficiency) is being strengthened with a new portfolio of strategies to strengthen energy efficiency across all sectors in the country till 2030. ROSHANEE also aims to bring together seemingly disparate national initiatives however, having common climate benefits such as Zero Effect, Zero Defect, Smart Cities and India Cooling Action Plan.

6. ROSHANEE aims to align the country's energy efficiency measures with the commitments under Nationally Determined Contributions in particular and to strive for United Nations Sustainable Development goals."

13. The Committee in their original Report had observed that the role of Bureau of Energy Efficiency (BEE) had become very crucial in implementation of various energy efficiency and conservation programmes and to fulfill this commitment, more energy efficiency measures were needed to be taken. The Committee had recommended for further expansion and intensification of energy efficiency programmes. From the reply submitted by the Ministry, the Committee observe that India ratified the Paris Agreement on Climate Change in 2016 under which its member countries have given commitments to make efforts in order to keep global average temperatures rise below 2 degree Celsius. India in its Nationally Determined Contributions (NDCs) has committed that it will reduce the emission intensity of its GDP from 33% to 35% by 2030 from the 2005 level. The Committee have been further informed that due to implementation of various energy efficiency measures, savings of 438 to 623 million tones of CO2 can be achieved by 2030 in the moderate and ambitious scenario respectively which will be approximately 50% to 60% of the total energy related emission reductions. As per the submission of the Ministry, the BEE with a view to reduce the energy intensity of the country, is planning to undertake new initiatives like optimize cooling related energy consumption, adoption of energy conservation building code by ULBs, widen and deepen PAT scheme, adoption of energy efficiency in MSMEs and minimization of fuel consumption in transport sector. The Committee also find

that BEE has proposed to merge its existing programmes/ schemes alongwith the new initiatives under a revised mission on enhanced energy efficiency i.e. Roadmap of Sustainable and Holistic Approach to National Energy Efficiency (ROSHANEE). While appreciating the initiative reportedly taken up by the Ministry/BEE to combat climate change by emphasizing on the energy savings practices, the Committee desire that they may be apprised of the concrete action taken and result achieved through the new initiatives.

CHAPTER II

OBSERVATIONS/ RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

(Recommendation No.1)

The Committee note that Gross Budgetary Support (GBS) of the Ministry of Power for the year 2019-20 is Rs. 15,874.82 crore. However, the Ministry of Power had made a proposal for Rs. 32,001.11 crore. The Committee further note that previous year also the Ministry of Power was allocated only Rs. 15,046.92 crore against the demand of Rs. 36,843.32 crore. However, the actual utilization of fund during the said period was Rs. 15,576.30 crore which is 103.5% of the Budgetary Estimate. The Committee also note that though previous year's allocation was the highest ever for the Ministry, even then they were able to fully utilized that.

The Committee appreciate the Ministry for full utilization of fund. The Committee expect this kind of committed and sincere efforts for achievement of set goals and targets. Considering the previous year's financial performance of the Ministry, the Committee are surprised at the substantial cut made by the Ministry of Finance in the proposal of the Ministry of Power for the year 2019. Though the Ministry of Finance has allowed for raising Extra Budgetary Resources (EBR) to the tune of Rs. 9,000 crore specifically for DDUGJY and Saubhagya scheme over and above the budgetary allocation of Rs. 15,874.82 crore, nevertheless the allocation is well short of the demand of Rs. 32,001.11 crore.

The Ministry of Power have stated that the projected requirement for Deen Dayal Upadhyay Gram Jyoti Yojana during the Interim Budget was Rs. 14,000 crore wherein only Rs. 4,066 crore is given in regular budget of 2019-20. In addition, Rs. 7,000 crore is given by the Ministry of Finance by way of raising EBR. It is further stated that total budget requirement under IPDS for the year is Rs. 6,150 crore. Out of the total requirement, only Rs. 5,280.45 crore is provided in the regular budget. The Ministry of Power have stated that the sought amount is needed to ensure closure of R-APDRP Part-A IT, SCADA and Part-B projects including Grant in aid of Rs. 100 crore. They have further stated that as on date claims worth Rs. 2,880 crore has already been processed/ are under process. Also, considering the progress of IPDS project utilities may need these funds for timely completion of IPDS projects.

Considering the submission of the Ministry of Power and their previous year’s financial performance, the committee are of the view that the budgetary cut may adversely affect the progress of their flagship programmes. The Committee have persistently been emphasizing the speedy and timely completion of the projects of important programmes of the Ministry viz. DDUGJY, Saubhagya and IPDS. They feel that it would be unfortunate if these programmes are delayed due to paucity of fund. The committee, therefore, strongly recommend that adequate fund should be provided to the Ministry of Power so that timely implementation of important programmes can be ensured. The Committee also expect that the Ministry of Power will sincerely pursue this matter at appropriate level and ensure that no delay in execution of work is caused for the want of fund.

REPLY OF THE GOVERNMENT

It is submitted that during current FY 2019-20, Rs.15,874.82 crore is allocated in RE 2019-20 along with Rs.9,000 crore under EBR given the full utilization of funds in 2018-19 i.e.103.5% of Budget Estimate 2018-19. In pre-budget discussion meeting, Ministry of Power had demanded an allocation of Rs.19,605.09 crore. However, Rs.15,874.82 cr was sanctioned by Ministry of Finance.

Ministry of Power regularly pursues the matter for allocation of fund at the time of pre-budget discussion meeting, Supplementary demand for grants and at various other forums from time to time. The Ministry also ensures that all flagship programmes of MoP do not suffer due to inadequacy of fund.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

(Recommendation No.2)

Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

The Committee are happy to note that the work of electrification of all the inhabited census villages across the country were completed as on 28th April, 2018 ahead of the timeline i.e. May, 2018. The Committee appreciate the Ministry for ensuring timely electrification of all the villages. The Committee believe that the achievement of target of electrification of all villages is not only an important milestone for the Power Sector but it would also help immensely in overall socio-economic development of the country.

The Committee further note that apart from Rural Electrification, there are two other components under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) viz. separation of agriculture and non-agriculture feeders to facilitate DISCOMs in the judicious rostering of supply to agricultural and uninterrupted quality power supply to non-agricultural consumers and strengthening and augmentation of Sub-Transmission & Distribution Infrastructure in rural areas, including metering of distribution transformers/feeders/consumers. In regard to status of implementation of these components, the Ministry have stated that though DDUGJY scheme is available till 2021-22, the Government of India is impressing upon States for completion of all the components of DDUGJY before the schedule time. They have also stated that 2910 new Sub-Stations have been established/augmented; the work on 94,380 km feeder separation completed; 2,88,852 new DT installed and 1,97,267 km LT and 1,16,792 km HT new line erected. The Committee note that overall progress under the scheme in the country is 62%. The Ministry have stated that slow progress of work in some of the States is due to delay in award of the contract, delay in getting forest & railway clearances, land acquisition for sub-stations, Right of Way (RoW) issues, law and order issues and difficult terrain etc.

The Committee are of the view that the other two components of DDUGJY are equally important and supplementary to rural electrification, therefore, every effort should be made to ensure their timely completion. The Committee would like the Ministry to coordinate with the States and provide required assistance to them to expedite the implementation of the programme if the pace of work is not satisfactory.

REPLY OF THE GOVERNMENT

The progress of the scheme and its components including system strengthening and metering is reviewed regularly by the Ministry. Issues are regularly taken up with concerned Additional Chief Secretaries/ Principle Secretaries Energy/Power of the States/UTs highlighting specific details advising them to promptly resolve the issues hampering the progress to ensure timely completion of works. Keeping in view the important aspects of each of the components of the scheme; especially feeder separation and metering of feeders & distribution, the Ministry has requested all the concerned States to ensure early completion of sanctioned works. Nodal Agency through its regional offices and officers also reviews the progress and facilitates expediting the projects.

Progress is also regularly reviewed in the Review, Planning and Monitoring (RPM) meetings with all States / Power Utilities and all concerned States / Power Utilities have been advised to accelerate the pace of execution of works to ensure completion of all sanctioned works at the earliest. Progress of rural electrification works is also shared in Power Ministers' Conferences.

During last three months ending 31.12.2019, 190 new sub-stations have been established/augmented, work on 6521 Ckm feeder segregation have been completed, 18809 new distribution transformers have been installed and 11285 Ckm LT & 1230 Ckm HT new lines have been erected under DDUGJY.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

(Recommendation No.5)

Integrated Power Development Scheme(IPDS)

The Committee note that the Integrated Power Development Scheme (IPDS) was formulated on 20th November, 2014 with an objective to provide 24x7 power supplies for consumers and to provide access to all urban households and facilitate State Power Utilities to reduce the level of AT&C losses to 15%. The programme (excluding R-APDRP component) have estimated outlay of Rs.32,000 crore including a budgetary support of Rs.25,354 crore from Government of India during the entire implementation period. Besides this R-APDRP scheme cost of Rs.44,011 crore including a budgetary support of Rs.22,727 crore as already approved by CCEA will be carried forward to the new scheme of IPDS in addition to the outlay for other components.

In regard to progress of implementation of the scheme, the Ministry have stated that a total of Rs.32,059 crore for 546 circles in 32 States/UTs has been sanctioned. Also, an amount of Rs.11,737 crore (of GOI component of Rs.20,103 crore) has been released by Ministry of Power to States in addition to Rs.181 crore for enabling activities for implementation of urban distribution system strengthening projects under IPDS. Utilities have reported that Sub-transmission and Distribution (ST&D) works have been completed in 336 circles out of 546 Circles. The Committee are well aware of the importance of IPDS scheme in strengthening of Distribution Sector which is the weakest link in the power system. The Committee are also aware of the enormity of work proposed to be carried out under the scheme and the complexities owing to involvement of multiple agencies. However, the Committee also note that

the scheme of R-APDRP was initiated way back in the year 2008 and even after more than a decade we are not able to reduce AT&C losses to 15%. However, it is another issue that even 15% AT&C losses are not justified if IPDS is fully implemented. The Committee are of the belief that unless the distribution sector is strengthened, economic viability of the whole power sector cannot be ensured. The Committee, therefore, recommend that all out efforts be made to expedite the execution of work under the scheme and provide assistance to Discoms to resolve issues if they themselves are unable to overcome it. The Committee, further desire that the Ministry should provide guidance and share information relating to best practices/success stories/experience learnt which are lagging behind in implementation of this scheme.

REPLY OF THE GOVERNMENT

Ministry of Power, Government of India along with M/s Power Finance Corporation, designated as nodal agency for operationalization of Integrated Power Development Scheme, have made concerted efforts for expediting implementation under the scheme through rigorous monitoring at highest levels.It is submitted that as on 31st March, 2020, an amount of Rs.12,451 crore (of GOI component of Rs.20,103 crore) has been released by Ministry of Power to States in addition to Rs.193 crore for enabling activities under IPDS.

A four tier monitoring mechanism for IPDS is adopted to ensure speedy implementation is as follows:

Tier I: Central level monitoring at MoP

- Monthly Review, Panning & Monitoring (RPM) meetings by Ministry of Power with Secretaries (Power) of States/CMDs of Discoms. Such meetings are often chaired by Hon'ble Minister of State (IC) for Power, GoI.
- IPDS Monitoring Committee under chairmanship of Secretary (Power) reviews implementation of IPDS (including subsumed R-APDRP) for operationalization of the Programme. MoP team also frequently visits States for expediting implementation.

Tier II: Concurrent Monitoring by PFC

- Regular reviewis being made by PFC, the nodal agency, along with Web based project monitoring. Also, day–to-day monitoring at the level of Nodal/Zonal Officers of PFC with States/Utilities to resolve Implementation issues, expediting milestone linked to progress of project implementation and release of funds. In addition to this, daily monitoring is being done, by UVAs (Urban Vidyut Abhyantas) stationed at Discom HQs.

Tier III: State level monitoring in states

- Regular monitoring and review at State level by Distribution Reforms Committee (DRC), chaired by Energy Secretary. Also, regular follow-up meetings are taken by MDs/CMDs of respective Power Utilities. Also, periodic reviews are taken by Disha (District Development Coordination and Monitoring Committee).

Tier IV: Quality Monitoring

- The Project Management Agency (PMA) appointed by Discoms to assist them in project management for ensuring timely implementation of project. Concurrent and post implementation evaluation by Third Party Concurrent Evaluating Agency (TPCEA) for verification of material and process at site, reporting of progress etc.

Rigorous monitoring of IPDS implementation by MoP and PFC has resulted in continuous improvement in overall progress of the Scheme. As on31st March, 2020, the overall progress of 85% has been achieved and work in 428 circles has already been completed.

Ministry of Power (MoP) /Power Finance Corporation (PFC) is facilitating sharing of information, best practices and success stories amongst the Discoms under IPDS in following ways:

- Technical Guidance is also provided to State Utilities to facilitate scheme implementation. Standard Bidding Document has been prepared and it incorporates specifications for all vital equipment. States may modify the same only after State DRC approval
- PFC, as the Nodal agency, has assisted in formulation of Detailed Project Reports (DPRs) by issuing Model DPRs, Guidelines, hand-holding Utilities for project implementation
- A system has been developed in-house for web-based project monitoring of IPDS/ R-APDRP on IPDS web portal
- Capacity building / training of Utility personnel is also carried out under IPDS – R-APDRP to enhance their skill. PFC / MoP also organizes workshops on technical areas, guidelines, best practices etc. for dissemination of information. PFC / MoP also issues guidelines for simplification of implementation procedures
- The Monitoring Committee also reviews the implementation of IPDS and issues guidelines / direction for taking corrective measures in this regard
- Dedicated workshops for sharing of Best Practices in IPDS Implementation - One workshop on Experience sharing/peer learning was held on 19-Dec-2018 at IHC, New Delhi where Best practices were presented by DISCOMs personnel
- Fund release under IPDS is being done through Public Financial Management System (PFMS). State Utilities have been trained on use of said system
- Best practices and success stories of Discoms are regularly shared on social media platforms as well as during the various review meetings organized by PFC and MoP
- To handhold the States where progress of implementation is slow special review meetings/visits are organized. Special conference for review of NER states was organized by MoP/PFC in April’19 and August’19

As such, MoP/PFC are already undertaking various measures for speedy implementation of the scheme, providing assistance to the States to overcome

critical issues hampering implementation, sharing of best practices at various forums etc.

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(Recommendations No.6)

The Committee note that reduction of AT&C is the main objective of IPDS. The works envisaged under IPDS are aimed at strengthening the distribution system and plugging the gaps so that AT&C losses can be brought down to the level of 15%. The Ministry have informed that as per latest available report (2015-16) of 'Performance of State Power Utilities' as released by Power Finance Corporation, AT&C losses at All India level stand at 23.98%. However, as per Ministry, the losses were at the level of 20.81 in the year 2018. The Committee find that despite decade long efforts and spending of thousands of crores is yet to be achieved the targeted level of 15% of AT&C losses. The Committee also finds it surprising that though IPDS scheme is being implemented circle wise, the circle-wise AT&C losses are not available with IPDS Unit, PFC. The Committee therefore, infer that there is no data to suggest that implementation of IPDS will necessarily lead to reduction of AT&C losses. They are of the view that the whole exercise of the Central Government becomes in-fructuous if the goal of reducing AT&C losses is left again on the discretion/will power of Discoms and their administrative capabilities to do so. The Committee in the past also have been raising the need for segregation of commercial losses and technical losses as far as possible so that the losses due to pilferages and inefficiency of Discoms in metering, billing and collection dues can be brought out and addressed. The Committee are aware that the Ministry offers incentive to Discoms on timely reduction of AT&C losses but still AT&C losses are not decreasing at the desired rate. The Committee, therefore, recommend that apart from creation of enabling infrastructure and providing financial incentives, the Ministry should form a study group to examine the case of each and every Discom whose performance is not up to the mark in terms of reduction of AT&C losses. The Committee expect that besides prescribing remedial action to them, the Ministry would put relevant data/information relating to AT&C losses of Discoms in public domain for awareness of consumers of the respective Discoms.

REPLY OF THE GOVERNMENT

Hon'ble committee is informed that IPDS Scheme was launched by GoI to extend financial assistance against capital expenditure to address the gaps in Sub transmission & Distribution network and metering in urban areas to supplement the resources of Discoms/Power Departments.

The AT&C losses have two components (i) Technical line losses, which occur due to heat losses when electricity flows in the wires; and (ii) Commercial losses, which occur due to wrong billing, non-billing, non-collection of billed amounts, pilferage of electricity etc. IPDS targets both the above components of AT&C loss through different measures.

Technical Line losses increase due to unsuitability of the distribution network to cater to loads posed by consumers. This could be due to inadequacy of network

capability to cater to loads, poor efficiency equipment installed in the network, or capacity of network being over-utilised beyond the standard continuous load permissible for network components. IPDS addresses these issues by providing funds for creating and augmenting Distribution infrastructure, which includes providing substations, high efficiency transformers, providing alternate paths for electricity flow through new conductors, and providing higher capacity of the conductors to cater to new loads. Therefore, with IPDS interventions, the network technical losses would automatically be reduced.

Commercial losses occur predominantly due to managerial and administrative inefficiencies, which can be handled through better governance and administration. IPDS provides extension of IT and OT (Operational Technology) based tools and techniques to the DISCOM administration to enable them to take informed evidence based decisions to reduce losses. However, the nature of the IPDS intervention in form of provision of these tools itself is not an automatic solution to the problem of reducing commercial losses. Efforts would have to be made by the Utilities to utilise the intelligence generated by these tools created under IPDS for proper management of commercial losses.

In so far as the Hon'ble Committee's observations on the non availability of circle wise data of AT&C losses is concerned, it is stated that the DISCOM circles consist of both Urban and rural areas. IPDS caters to requirements of only urban areas. Due to inherent construct of the Circles, which subsume both urban and rural areas, the exclusive effects of IPDS on the circle AT&C losses cannot be ascertained. However, it is also stated that town/feeder wise AT&C losses can be ascertained after all the IT/OT related works under IPDS would be completed.

In view of the above, it is submitted that the interventions under IPDS have been designed for reduction in AT&C losses, and the overall trends indicate a reduction in the loss levels, even though they have not come down to the targeted levels of 15% yet. This may also be viewed in light of the fact that the full complement of IPDS, especially the IT/OT intervention projects are yet to be completed in the DISCOMs, and it is expected that the same would be of help to the Utilities in reducing the AT&C losses.

In so far as the transparency of information of AT&C losses of urban towns/cities in public domain is concerned, it is stated that the information has already been made available in the public domain through the national power portal https://npp.gov.in. As and when new urban feeders will get IT/OT enabled under IPDS, the information of the same will be ported on this portal.

In so far as the DISCOM/State level AT&C losses are concerned, it is stated that the same is regularly discussed with the State Government Energy Department officials and DISCOM officials during the Review Planning and Monitoring meetings held at New Delhi as well as in the Power Minister's conference. Apart from the above, reports on the performance of DISCOMs, including AT&C losses and other operational and financial parameters, are also sent to the States.

(Recommendations No.7)

Bureau of Energy Efficiency(BEE)

The Committee note that Bureau of Energy Efficiency (BEE) is the nodal central statutory body to assist the Government in implementing the provisions of the Energy Conservation Act. As a quasi-regulatory and policy advisory body, the Bureau helps in developing policies and strategies that emphasize self-regulation and market principles to achieve the primary objective of reducing the energy intensity of the Indian Economy.

The Committee feel that budgetary allocation to BEE during the last 4-5 years is not commensurate with the importance of an organization which is responsible for implementing a significant programme – 'Energy Efficiency'. Moreover, the actual utilization of allocated fund during the period leaves much to be desired. In the year 2015-16, the actual utilization was Rs. 35 crore against the allocation of Rs. 48 crore. Similarly, in 2016-17, 2017-18, and 2018-19 the actual utilization was Rs. 54.15 crore, Rs. 27 crore and Rs. 10.49 crore against the allocation of Rs. 63.29 crore, Rs. 49 crore and Rs. 100.16 crore respectively. During the current year Rs. 100.16 crore has been allocated. Considering their necessity and enormous benefits derived from the Energy Efficiency programmes, the Committee are of the opinion that there is a need to suitably enhance the fund allocation for BEE. However, at the same time they also desire that whatever fund is allocated to them should be fully utilized.

REPLY OF THE GOVERNMENT

It is submitted that during the 12th Five Year Plan, funds for various energy conservation/efficiency activities were provided through different schemes, namely, (i) Providing Financial Assistance to State Designated Agencies (SDAs); (ii) Demand Side Management (DSM); (iii) Standard and Labeling (S&L) and (iv) Energy Conservation Awards and Awareness. After the end of 12th Five Year Plan, these four schemes have been merged into one scheme i.e. "Promoting Energy Efficiency Activities in Different Sectors of Indian Economy". Further, impediments in utilization of budgetary allocations under the activities related to energy efficiency/conservation have been removed.

In the current year (2019-20) against the budget estimate of Rs. 213.37 crore for both heads, an amount of Rs. 145.37 crore has already been released. BEE is expected to utilize the full allocation during this year.

Further, adequate budgetary allocations are being made to support the activities/programmes relating to energy conservation.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

(Recommendation No. 8)

The Committee note that India has been participating as one of the leading party in the Conference of Parties (COP) under the United Nations Framework Convention on Climate Change (UNFCCC). The twenty-first session of the COP that took place in 2015 at Paris reached a landmark agreement called "Paris Agreement"

to combat climate change. The aim of the Paris Agreement is to strengthen the global response to the threat of climate change by keeping the global temperature rise well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degree Celsius. The Government of India has submitted its Nationally Determined Contributions (NDCs) to UNFCCC in 2015, endorsing country's ambitious commitment towards the issues to climate change and ratified it in the year 2016.

In this scenario, the Committee feels that the role of BEE has become very crucial in implementation of various energy efficiency and conservation programmes. To fulfill this commitment, more energy efficiency measures have to be taken. However, the Committee also believe that irrespective of that commitment, expansion and intensification of energy efficiency is in the interest of the Country. Energy Efficiency Programmes are not only beneficial from environment perspective but also a profitable business as it leads to reduction in energy cost. The Committee find that the energy efficiency programs being run by BEE are relevant and quite effective and the saving caused by them in terms of energy and cost, is astonishing. Though remarkable achievements have been made under these programmes, the Committee are of the belief that there is still great potential in the field of energy efficiency. The Committee, therefore, recommends that Energy Efficiency Programmes should further be expanded and intensified.

REPLY OF THE GOVERNMENT

India ratified the Paris Agreement on Climate Change in 2016 under which its member countries have given commitments to make efforts in order to keep global average temperatures rise below 2 degree Celsius. India in its Nationally Determined Contributions (NDCs) has committed that it will reduce the emission intensity of its GDP by 33% to 35% by 2030 from 2005 level. To achieve the above, it would be necessary to continue with its ongoing interventions and enhance the existing policies.

2. As per the study commissioned by BEE, while emphasizing on the energy savings in each of the demand sectors, emission reduction is possible through adoption of energy-saving practices, use of novel technologies and better enforcement of existing policy and programmes. It is envisaged that due to implementation of various energy efficiency measures, savings of 438 to 623 Million Tonnes of CO_2 can be achieved by 2030 in the moderate and ambitious scenario respectively, which will be approximately 50% to 60% of the total energy related emission reductions.

3. In order to achieve above, BEE is planning to undertake following new initiatives with an overall objective to reduce the energy intensity of the country:

S.No.	Initiative	Action to be taken
I	Optimize cooling related energy consumption	India is one of the fastest major growing economies of the world. The present AC penetration is only 7% in the households and is poised to increase to over 20% by 2030. Moreover, with rapid industrialization, urbanization, increase in per capita income of the people, the cooling demand is bound to increase in a significant way. India is ready to take

		this challenge, by optimizing the cooling demand, using efficient and climate friendly technologies to tackle this growth.
II	Adoption of energy conservation building code by ULBs	The updated version of the Energy Conservation Building Code (ECBC) was launched in 2017 and till date 15 States / UTs have notified the same. For effective implementation of ECBC, it is necessary to incorporate in the municipal bye laws. Post Notification of ECBC in States, the bye laws will be amended to incorporate ECBC provisions and then gradually adoption and enforcement of ECBC compliance will be taken up by ULBs.
III	Widen and deepen PAT scheme	Coverage of PAT scheme for sectors such as Glass, Ceramic, Chemicals, Mining & Non-Ferrous Metals (Copper/Zinc) are being considered. Industrial sector coverage under the programme is over 60% with a target to reach 75% by 2024 – 25. Energy Intensive sectors like Iron & Steel, Thermal Power Plants, Refineries, Petrochemical to save 21 million TOE.
IV	Adoption of energy efficiency in MSMEs	MSME sector to be new focus area with schemes to deploy energy efficient technologies in process – Cold Chain sector to be one of the key area.
V	Transport sector fuel consumption to be minimized through fuel efficiency norms for Passenger Cars, HDVs and LCVs.	Transport sector consumption to be minimized by prescribing fuel efficiency norms for Passenger Cars, Heavy Duty Vehicles (HDVs), Light Commercial Vehicles (LCVs) and Tractors.

4. Additionally, BEE has proposed to merge its existing programmes/ schemes alongwith the new initiatives under a revised mission on enhanced energy efficiency i.e. “Roadmap of Sustainable and Holistic Approach to National Energy Efficiency (ROSHANEE)”. The revised mission has a broader vision and takes into account all the potential areas of energy efficiency in various sectors, covering the macro level in policy and further delineating the respective schemes. The revised mission includes the ongoing activities of BEE that have contributed significantly towards enhancing energy efficiency in all the sectors of the economy along with CO_2 mitigation. The revised programme also has a dedicated component for facilitating financing of energy efficiency activities in India. It also targets the industrial sector in entirety ranging from large to small and medium enterprises. It also deals with the subject of Demand Side Management. It clearly outlines the strategies that need to be adopted for achieving India’s Nationally Determined Contribution commitments.

5. Through the ROSHANEE document, NMEEE (existing National Mission for Enhanced Energy Efficiency) is being strengthened with a new portfolio of strategies to strengthen energy efficiency across all sectors in the country till 2030. ROSHANEE also aims to bring together seemingly disparate national initiatives

however, having common climate benefits such as Zero Effect, Zero Defect, Smart Cities and India Cooling Action Plan.

6. ROSHANEE aims to align the country's energy efficiency measures with the commitments under Nationally Determined Contributions in particular and to strive for United Nations Sustainable Development goals.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

Comments of the Committee

(Please see Para No. 13 of Chapter – I of the Report

(Recommendation No. 9)

The Committee note that BEE have enumerated many constraints which are being faced in implementation of various Energy Efficiency programmes. They have prominently raised the issue of financing of Energy Efficiency projects and stated that it still continues to be the grey area in this sector. Energy Efficiency financing is considered to be loaded with high risks in most of the cases. Industries are hesitant to invest with the perception of longer period for getting return on investment. Energy Service Companies (ESCOs) are facing shortage of adequate funds thereby stalling the projects on ESCO mode and restricting their adequate institutionalization. Energy Efficiency financing through commercial banks and NBFCs is facing the lack of awareness and capacity to understand the Energy Efficiency Financing concepts like factors to be considered during appraisal process, technical risk appraisalconsiderations, etc. The Committee desire that lack of finances should not become a roadblock in implementation of Energy Efficiency Programmes, therefore, they recommend the Ministry to take up this issue at appropriate level for its resolution. The Committee also expect the Ministry to encourage Public Sector Undertakings of Power Sector to finance these projects.

REPLY OF THE GOVERNMENT

Ministry of Power as well as the Bureau of Energy Efficiency have been making efforts to overcome the difficulty of financing of energy efficiency projects. Solutions for the same are being explored with the help of Financial Institutions/Central Public Sector Undertakings.

Action Taken in this regard are as follows:-

(i) Energy Efficiency Financing Platform (EEFP) was launched as one of the initiatives under National Mission for Enhanced Energy Efficiency to provide a platform to interact with Financial Institutions (FIs) and project developers for implementation of energy efficiency projects. Under this programme, MoUs have been signed by BEE with M/s. PTC India Ltd, M/s. SIDBI, HSBC Bank, Tata Capital and IFCI Ltd to promote financing for energy efficiency projects.

(ii) For capacity building of FIs, BEE signed MoU with Indian Banks' Association for the Training Programme on Energy Efficiency Financing. The MoU was signed in

2015 and this training programme was launched in June 2015. These workshops have been held in two phases. Phase 1 included four ToT workshops and two direct training workshops. In phase 2, twenty two direct training workshops for FIs on EE Financing were held at different locations (seventeen States covered) across India. In these workshops total of 682 participants from 72 banks/NBFCs received training on EE financing.

(iii) Currently, BEE is working on conducting "Investment Bazaar for Energy Efficiency" in four regions of India to accelerate and facilitate financing of EE projects/technologies through SDAs. Further, all SDAs have also been directed to constitute FIs committees for accelerating EE financing in respective states to enable institutions to address financing issues at state level itself.

(iv) A round-table meeting under the Chairmanship of Secretary (Power) was held recently with heads of Financial Institutions (Banks/NBFCs) for scaling up Energy Efficiency financing.

(v) Heads of Financial Institutions (Banks/NBFCs) have asked for more such meetings in order to explore ideas for expanding energy efficiency financing.

(vi) Energy Efficiency Services Limited (EESL), a joint venture of four Central Public Sector Undertakings (CPSUs) of Ministry of Power, namely, NTPC Limited, PFC Limited, REC Limited and PGCIL has been established under Ministry of Power. EESL has been implementing most of the Demand Side Management (DSM) energy efficiency programmes / schemes / projects across the country.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

(Recommendation No. 10)

Central Power Research Institute (CPRI)

The Committee note that the core activities of the Central Power Research Institute (CPRI) are Applied Research in electrical power engineering, Testing & Certification of Power equipment, Consultancy and Field testing services to Power Utilities and Industries, Third Party Inspection and Vendor Analysis, Organizing Customized Training programs for Utilities arid Industries. The Committee also note that a provision of Rs. 200 crore has been made for CPRI for the year 2019-20. The allocation of Rs. 200 crore may appear sufficient considering track record of the organization in utilization of fund, the Committee, however, are of the view that it does not reflect the future aspirations of the country. The Committee believe that there is immense potential for Research and Development in the Country as we are one of the biggest consumers of power in the world with a vast network and mammoth infrastructure. However, when it comes to major achievements in the field of technology and innovation, still much is needed to be done. The Committee are of the view that instead of being dependent on developed countries for research and technological upgradation, it would be prudent if we take initiatives and provide support to our research institutes to work on the projects which would cater our specific requirements. The Committee feel that development of storage capacity, electric vehicle and its charging system, efficiency of solar panels etc. are some of the areas where we need to focus. They also feel that there is a need to expand the

base of R&D in the Country so that we can not only fulfil our domestic requirements but also become a leading country in the field of technology and innovation.

REPLY OF THE GOVERNMENT

In order to identify and prioritize the research areas in Power Sector, MoP has constituted the Standing Committee on R&D (SCRD) chaired by Chairperson, CEA and having representations from Academia (Eminent professors from IITs), Industry (Senior Management of BHEL), Utilities (Senior Management from POWERGRID, NTPC, NHPC) and Govt. of India (MNRE, MoP, CEA, DST).The SCRD periodically reviews the research requirements in the country and steers the research schemes for introduction of innovations in Power Sector. CPRI is responsible for implementing Research Schemes of Ministry of Power. During the last five years, 125 projects with an outlay of Rs 74.40 crores have been awarded under the research schemes which include projects to eminent institutions like IIT Kharagpur, IIT Kanpur, IIT Madras, IIT Bombay, NIT Meghalaya, NIT Silchar, CMET Thrissur etc. It is proposed to further advance the research activities in Power Sector and build a strong research foundation for India by supporting the research Institutes on projects catering to indigenous requirements.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

(Recommendation No. 11)

National Power Training Institute (NPTI)

The Committee note that National Power Training Institute (NPTI) is a National Apex body for fulfilling the training requirements of the power sector in the Country. Also, NPTI has been appointed as the Certifying Authority for SystemOperator of NLDC, RLDCs, SLDCs. NPTI also functions as an Apex Cadre Training Institute for Engineer/Officer of Central Power Engineering Service (Ministry of Power, Govt. of India). NPTI operates through nine Institutes in the different power zones of the county on an all India basis with Manpower Strength of 219 including 87 Officers and they have trained over 3,37,900 power professionals in its regular programs over the past five decades. The Committee note that the budgetary allocation for NPTI for the year 2016-17, 2017-18 and 2018-19 was Rs. 40.40 crore, 57.20 crore and 100.55 crore respectively. However, for the year 2019-20, an allocation of only Rs. 69 crore is made. The decrease in allocation of fund for NPTI is a bit surprising for the Committee. The Committee are well aware of the requirement of trained personnel for development of power sector and are of the opinion that shortages of trained manpower should not come in the way of faster development of the sector. The Committee have observed that in implementation of every scheme of the power sector, the availability of adequate trained manpower has been an issue. Also, for undertaking any reform in the power sector, proper training of personnel is a pre-requisite. The Committee, believe that there is dire need to augment our training capacities considering technological up-gradations and future reforms which will require more and more trained manpower. The Committee, therefore, recommend the Ministry to review the budgetary provisions for NPTI with a view to enhance it.

REPLY OF THE GOVERNMENT

NPTI

As per recommendation of the Standing Committee on Energy, NPTI was allocated an amount of Rs.69.00 crore for the Financial Year 2019-20 which included Grants in Aid towards Pension Corpus Fund of Rs. 15 crore and Rs.54 crore towards creation of Capital Assets. During the R.E 2019-20, this amount has been proposed to be enhanced to Rs.75.69 crore. Against the B.E 2019-20 allocations, an amount of Rs.23.50 crore has been spent by NPTI which includes Rs.15 crore towards Pension Corpus and Rs.8.5 crore towards creation of Capital Assets. Currently, three Capital Asset creation projects are under implementation as under:-

Name of Project	Physical progress as on 31.12.2019	Financial progress as on 31.12.2019	Remarks
New Institute at Alappuzha, Kerala	99%	Against the revised cost of Rs.75.42 crore, Rs.74.97 crore has been released (99.40%)	The project is expected to be completed in the F/Y 2019-20
New Institute at Shivpuri, M.P	99%	Against the approved cost of Rs.64.23 crore, Rs.62.60 crore has been released (97.46%)	-do-
Renovation, Modernization and Augmentation of 9 Training Institutes	99%	Against the approved cost of Rs.73.97 crore, Rs.70.19 crore has been released (94.88%)	-do-

For the B.E 2020-21, NPTI has proposed Rs.121.49 crore, which includes Rs.30 crore for strengthening of Pension Funds and Rs.91.49 crore for new projects and capacity building. The existing projects are expected to be completed during the current Financial Year 2019-20. NPTI has to ensure self-sustainability through its operations. The Government of India's grants are restricted to Contribution towards Pension Fund and Creation of Capital Assets. Future allocation of NPTI would be made based on its revenue generation, physical/financial progress of its existing projects and impact of the capital grants already sanctioned for Asset creation.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

***(*Recommendation No.12**)

Ujwal Discom Assurance Yojana (UDAY)

The Committee note that UDAY (Ujwal DISCOM Assurance Yojana), a scheme for financial and operational turnaround of Power Distribution(DISCOMs) was formulated and launched by the Government on 20th November, 2015 in consultation with the various stakeholders to ensure a sustainable permanent solution to the problem of legacy of debts and address potential future losses. The scheme envisages reform measures in all sectors — generation, transmission, distribution, coal, and energy efficiency. The Scheme also envisages reducing interest burden, cost of power and AT&C losses. Under the scheme, States are to

take over 75% of debt of DISCOMs as on 30th September, 2015 which would be outside the FRBM limits. The Scheme is operationalized through a bipartite/tripartite agreement amongst the Ministry of Power, State Government and the DISCOMs. The Scheme is optional for all States to join and there is no financial implication on the part of the Central Government.

The Committee also note that so far 27 States and 5 UTs have signed Memorandum of Understanding under UDAY. While 16 States have signed comprehensive MoU which includes financial restructuring of debt, other 16 States/UT have signed the MoU only for operational improvements. States of West Bengal and Odisha and Union Territories (UTs) of Delhi and Chandigarh have not joined the scheme. 16 states which have opted for financial restructuring, a debt of Rs.2.69 lakh crores were sought to be addressed (3 states i.e. Maharashtra, A.P. & Tamil Nadu have opted for restructuring of only a part of their debt). Out of the above, total of Rs.2.32 lakh crores of Bonds have so far been issued (87% of UDAY states debt to be addressed) consisting of States Bonds of Rs.2.09 lakh crores and DISCOMs Bonds of Rs.0.23 lakh crores. DISCOM Bonds worth Rs.0.37 lakh crores are yet to be issued.

In regard to achievement under UDAY, the Committee note that AT&C losses which were at 20.81% in the year 2016, have dropped to 18.19% in the year 2019. During the same period billing efficiency has also slightly improved from 81.57% to 84.31%, whereas, no improvement in collection efficiency is reported. The only encouraging result has been seen in the gap between Cost of Supply (ASC) and Average Revenue Received (ARR) which was drastically reduced to 0.17 (Rs./kWh) in 2018 from 0.60 (Rs./kWh) in 2016. However, during the year 2019 it has rebounded and increased upto 0.27 (Rs./kWh). Likewise, the losses of Discoms which were reduced to Rs.15,132crore in the year 2018 have again increased to Rs.28,036 crore in the year 2019.

The Committee had high expectations hopes that UDAY would be successful in turning around the financial condition of the Discoms by making them economically viable on sustainable basis. However, it is a matter of concern for the Committee that the losses of Discoms are rebounding after 3 years of introduction of UDAY. The Committee have always been emphasizing the importance of Distribution Sector for power sector and the need for reformsto make it robust and self sustainable.The Committee, therefore, recommend the Ministry to examine the reasons responsible for rebounding of losses and take remedial measures on urgent basis. The Committee also expect that necessary changes shall also be made in UDAY to make it more effective.

REPLY OF THE GOVERNMENT

The committee has observed that there has been a slight improvement in the billing efficiency whereas the collection efficiency hasn't much improved. Further, the committee has also mentioned that the ACS-ARR Gap has rebounded and increased up to 0.27 (Rs/kWh) in the year 2018-19, from 0.17 (Rs/kWh) in the year 2017-18.The Committee has also expressed its concern that the losses of Discoms are rebounding after 3 years of introduction of UDAY and has recommended this Ministry to examine the reasons responsible for rebounding of losses and take

remedial measures. The reason behind the observations of the Committee is given below:

(i) AT&C losses- As part of the UDAY scheme, the Discoms were mandated to improve their operational performance, by reducing their technical and operational losses and improve the reliability of the service provided. Discoms have been mandated to reduce the AT&C losses against the set targets. The results of the initiatives taken under the scheme have shown decrease in the AT&C losses as mentioned in the figure below:

Figure 1 : AT&C Losses trajectory (Source: 2003-04 to 2014-15: National level AT&Closses, PFC report 2015-16 onwards: UDAY states' average AT&C losses , UDAY portal)

It can be noted that post the UDAY scheme in the year 2015-16, states have shown improvement in the billing efficiency. The average billing efficiency of the UDAY states improved by around 3%, bringing the efficiency to around 83.9% in the year 2018-19 from 81.6% in the year 2015-16.

Similarly, the collection efficiencies of the states have also improved. While the Discoms are focusing at improving their collection efficiencies, the dues from the state government departments are on the rise and the details are shown in the figure below.

Parameter	2015-16	2016-17	2017-18	2018-19
Govt.Dues in (in Rs. Crores)	18,369	29,891	36,900	41,745

Figure 2 : Dues from the State Government Departments in UDAY states (Source: UDAY Portal)

The rise in the dues from state government departments are leading to the delay in the collections, causing the overall annual collection efficiency of the UDAY states to be almost at the same levels and impacting the reduction of the AT&C losses. To ensure that the dues are cleared, the state governments have been intimated to look into the clearance of these dues, thereby aiding the Discoms to clear their payments and manage funds for working capital and contingency requirements.

In addition to this, the Discoms are also being asked to take measures such as installation of smart meters and ABC cabling for theft-prone areas, setting up and operationalization of dedicated IT cells, real-time feeder monitoring, constant analysis of online consumer data, introduction of online billing in rural areas, strict action against power theft, and establishment of special police stations that deal with theft issues. These measures shall facilitate the states in improving the collections and reducing the AT&C losses with respect to their targets.

(ii) ACS-ARR Gap: Under the UDAY scheme, the gap between the Average Cost of Supply (ACS) and the Average Revenue Received (ARR) per unit from 0.59 (Rs. /kWh) in the year 2015-16 to 0.27 (Rs/kWh) in 2018-19, a reduction of 0.32 (Rs/kWh) over three years.

Although the ACS-ARR gap has reduced in the year 2018-19, it has rebounded and increased when compared to the same of 0.17 (Rs/kWh) in the year 2017-18. This can majorly be attributed to the increase in the cost of power purchase and the establishment costs. Power purchase costs have increased majorly due to the increase in the costs of railway freight and coal. These factors led to the increase in the average cost of supply, thereby increasing the ACS-ARR gap.

To further elaborate, the railway transportation charges of coal have increased by 21% in January 2018 and by 9% in November 2018.

Figure 3: Details on the Railway Freight rates of transportation of Coal (Source: Indian Railways)

Corresponding to the increase in the freight charges, the prices of coal have also increased. The price per tonne for most grades of coal have increased since January 2018.The price of G12 grade coal increased by 17% in January 2018.

Figure 4 : Trend of Coal Price (Source: Coal India Limited)

As a result of these price hikes, the average cost of power purchase for the UDAY states in the year 2018-19 was 4.42 (Rs/kWh) against 4.20 (Rs/kWh) in 2017-18.

Also, the establishment costs, due to the increase in the administrative expenses owing to the hike in the employment costs as per the recommendations of the 7th pay commission, have also increased to 0.72 (Rs/kWh) in the year 2017-18 to 0.77 (Rs/kWh) in the year 2018-19, further increasing the average cost of supply.

Continuous creation of Regulatory assets (Annexure), are causing the states and regulators not to increase tariffs to the extent required, thereby ostensibly avoiding tariff shocks to the consumers. This can be observed in the increase in the average revenue received. While the ACS increased by 5% in the year 2018-19 (when compared with 2017-18), the increase in the ARR was around 3% in the same time period.

All stakeholders are being advised that no further Regulatory assets should be created in future and already created Regulatory assets should be liquidated at the earliest. A new tariff policy is under consideration to address this issue.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

(Recommendations no. 13)

Development of Power Sector

The Committee note that there is 3,63,370 MW of total installed generation capacity in the country. The Committee further note that against the Peak Demand of 177,022 MW, only Demand of 175,528 MW was met leaving a gap of 0.8%. Similarly, against the total energy requirement of 1,274.6 BU, only 1,267.5 BU could be supplied with a deficiency of 0.6%. During the year 2019 also there is Peak and Energy deficit of 0.7% and 0.5% respectively. The inability to fully meet the demand despite having more than adequate installed generation capacity indicates that there

are some issues which need to be addressed. The Ministry have stated that this demand-supply gap is due to constraints in the sub-transmission and distribution network, commercial reasons, financial constraints of State utilities, etc. The Committee feel that a concrete plan need to framed to bridge the gap between demand and supply as the country at present have the installed generation capacity in excess of the peak hour demand. The Committee, therefore, recommend that sincere efforts be made to remove the constraints in meeting the demand of electricity in the country.

REPLY OF THE GOVERNMENT

It is to note that commercial reasons and financial constraints are *inter alia* factors for contributing to the demand-supply gap. High AT&C loss and costs outstripping the revenue are amongst the main reasons contributing to poor financial health of the Discoms. Electricity is a concurrent subject and distribution of electricity falls under the purview of the respective State Governments / State Power Utility. It is the responsibility of distribution licensees to take necessary steps in their system and be financially stable.Government of India supplements the efforts of States by launching various schemes such as Integrated Power Development Scheme (IPDS), DeenDayalUpadhyaya Gram JyotiYojana (DDUGJY), Saubhagya, UjwalDiscom Assurance Yojana (UDAY) etc.

A new comprehensive scheme is being evolved by the Ministry of Power which would address the issues being faced in the power sector.

(Recommendations no. 14)

The Committee note that there are 34 stressed assets in thermal power sector. Out of 40,130 MW of the total capacity of theses 34 projects, 26,265 MW is commissioned, 19,005 MW capacity has PPA and 25,702 MW has fuel linkage. The Ministry have stated that they have classified these projects in three categories. Category-I projects which are mostly commissioned and have been resolved/likely to be resolved and /or serving their debt and/or are not in NCLT. A total of 17 projects come under this category. 11 out of 17 of these projects have already been resolved. Category-II projects are only partly commissioned and have been referred to or admitted under NCLT waiting for resolution. A total o 11 projects come under this category. Category-III: Projects which are at very initial stage of construction and are totally stalled. Such projects have either been ordered to be liquidated or are heading towards liquidation. A total of 6 projects come under this category.

The Ministry have enumerated various efforts that have been made to take out these projects from stress. The Committee have considered stress/NPA in the power sector as an important issue, therefore, they have examined this subject in detail and presented Reports thereon. The Committee, therefore, recommend the Government to pursue this matter diligently and should leave no stone unturned to find a solution to this problem. Needless to emphasize that while resolving the matter sincere efforts be made by the Government to make these assets standard by providing all possible assistance to them before they are ultimately considered for liquidation.

REPLY OF THE GOVERNMENT

The Status of 34 stressed thermal power projects: Out of 34 projects of capacity 40,130 MW under stress as reported by DFS, 14 projects with a total capacity of 16,450 MW have been resolved.

Government of India constituted an HLEC under the Chairmanship of Cabinet Secretary to address the issues of stressed thermal power projects. HLEC recommendations were considered by GoM. The recommendations of the GoM were approved by CCEA on 07.03.2019, which were circulated vide Govt. approval dated 08.03.2019.

The following steps have been taken by the Government to resolve the stress in the Power Sector:

1. After the cancellation of 204 coal blocks, Govt. of India, Ministry of Coal formulated a transparent policy for reallocation of cancelled coal mines in a fair and transparent method. Government has re-allocated 65 blocks through auction/allotment till date.
2. Fuel linkages under SHAKTI:-Govt. of India, Ministry of Coal has approved a new coal linkage allocation policy on May 17, 2017 i.e. SHAKTI (Scheme for harnessing & allocating koyla transparently in India). Under the scheme, coal linkages have been allotted under B(i) for 8870 MW capacity, 1st round of B(ii) for 7401MW capacity and 2nd round of B(ii) for 667.5 MW capacity.
3. (i) Power Finance Corporation Consulting Limited (PFCCL) has issued Expression of Interest (EoI) for 3rd round Auction under para B(ii) of SHAKTI Policy on January 8, 2020.

   (ii) CIL is conducting linkage auction under para B(iii) of SHAKTI for long/medium term PPA. The notice inviting registration was issued on 10.12.2019. The notice for inviting EoI from the interested bidders was also published on 13.12.2019.

   (iii) Central Electricity Authority (CEA) has published Guidelines for auction of coal linkage under SHAKTI Policy Para B(viii) (a) covering Para B(iii) on 14.01.2019.

   Based on request of Ministry of Power, Ministry of Coal vide letter dated 13.04.2016 started separate e-auction window for power sector. MoC vide OM dated 25.03.2019 has issued an advisory to Coal India Limited for earmarking of at least 50% of the total coal meant for e-auction for power sector. CIL intends to offer 10% of its targeted production of 660 million tons in 2019-20 through e-auction and out of which 50% of the quantity i.e. 33 million tons is planned to be offered under Special Forward e-Auction. An annual auction calendar has been put on the CIL website as well.
4. Pilot project for procurement of 2500 MW power:- In order to address the problem of lack of Power Purchase Agreements (PPAs) in the country, the Ministry of Power had notified a scheme for procurement of 2500 MW on competitive basis for a period of 3 years from the generators with commissioned projects having untied capacity. Bids received from 7 (seven)

projects for aggregate power of 1900 MW. Letter of Award (LOA) was issued to all the successful bidders (1900 MW).

5. Ministry issued an order on 28.06.2019 and subsequent corrigendum thereon on 17.07.2019 regarding opening and maintaining of adequate Letter of Credit (LC) as payment security mechanism under PPAs by Distribution Licensees. Vide the order, NLDC & RLDC have been directed to despatch power only after it is intimated by the Generating Company and Distribution Companies that a Letter of Credit for the desired quantum of power has been opened and to made available the copies to the concerned Generating Company.
6. Ministry issued direction to CERC under section 107 of The Electricity Act, 2003 on 27.08.2018 for allowing pass-through of any change in domestic duties, levies, cess and taxes imposed by Central Government, State Government/Union Territories or by any Government instrumentally leading to corresponding changes in the cost, may be treated as "Change in Law" and may unless provided otherwise in the PPA, be allowed as pass through. The order of pass through giving the calculation of per unit impact will be issued within 1 month of filing petition. Where CERC has already passed an order to allow pass through of changes in domestic duties, levies, cess and taxes in any case under the Change-in-law, this will apply to all cases ipso facto and no additional petition would need to be filed in this regard.
7. Flexible Utilisation of Coal Linkage: States have been impressed upon to make use of the policy of flexibility in utilisation of domestic coal for reducing the cost of power generation i.e. use of linkage coal of State Gencos in IPPs and get cheaper power generated from such coal.
8. SLC (LT) in its meeting held on 24.06.2019 has recommended for grant of linkages from Coal India Limited under Para B (iv) of SHAKTI policy to the States of Gujarat (4000 MW), Uttar Pradesh (1600 MW) & Madhya Pradesh (2640 MW), and for grant of linkage (around 10MT/annum) from CIL under para B (v) of SHAKTI policy.
9. CERC and FoR have been requested to mandate that the Late Payment Surcharge (LPS) be paid in case of delay in payment by DISCOMs as per the provisions of PPA.
10. Advisory issued to the States, PGCIL and MoEF&CC that PPA/FSA/Transmission connectivity/EC/FC/Water etc. not be cancelled if project is referred to NCLT or is acquired by another entity.
11. Advisory issued to the States that PPA not to be cancelled in case of delay in commissioning of project for reasons not attributable to the generator.

    The Government is taking all necessary steps to resolve the stress in the power sector.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

(Recommendations no.15)

The Committee have also observed that supply of coal is one of the main issues that are creating problems for the power sector. The issue of non-availability/short supply of coal, is not only causing stress to many power plants, but also adversely affecting the tariff of electricity. Despite raising this issue time and

again, the Committee find that there is still no satisfactory resolution of this issue. In the view of the Committee, the short supply of coal for power, for whatever reason, is a matter of concern, more so, when there are abundant coal reserves in the country. Due to constraints in supply of domestic coal the power sector is resorting to import of costlier coal which obviously results in higher tariff of electricity. The Committee, therefore, recommend that the Ministry of Power should take up this matter at appropriate level to find a long term solution to this problem. The Committee are also aware that some flexible use arrangement/rationalisation of coal supply from different sources has been done which has not only helped in optimizing operation of power plants but also resulted in considerable savings. The Committee laud this effort and also desire that similar efforts shall further be made to optimized utilization of available coal resources.

REPLY OF THE GOVERNMENT

The total receipt (domestic & imported) and consumption of coal by coal based thermal plants in the country during the last three years and the current year (Apr-Nov, 2019) are as under:

(Figures in Million Tonnes)

Year	Receipt				
	Domestic	Imported			Total Receipt
		For blending purpose	Imported coal based plants	Total Imported	
2016-17	494.8	19.8	46.3	66.1	560.9
2017-18	538.6	17.0	39.4	56.4	595.0
2018-19	582.1	21.4	40.3	61.7	643.7
2018-19(Apr-Nov)	378.5	13.4	25.7	39.1	417.6
2019-20(Apr- Nov)	362.8	16.3	30.2	46.5	409.4

As can be seen from above, receipt of domestic coal has been increasing except, during current year 2019-20 (Apr-Nov), which has shown negative growth of 4% as compared to same period last year. This is due to less system demand during current year. Further, the coal stock available with the power plants as on 30.11.2019 was about 29.7 Million Tonnes (MT) showing an increase of about 67% as compared to same day last year(17.8 MT as on 30.11.2018).

Power plants designed on domestic coal are importing coal for blending purposes, considering their cost-economics and to bridge the shortfall in the availability of domestic coal, if any. However, the quantum of import for blending is very less as compared to domestic coal receipt. Further, power plants designed on imported coal, are importing coal to meet their fuel requirement as they are designed to operate on imported coal. Further, import of coal is under Open General License (OGL), and hence, the power utilities import coal considering their cost economics. As per Import substitution Notice of CIL dated 05.02.2019, power utilities were given option for supply of coal under Import substitution to meet their shortfall against ACQ for FY 2018-19. Subsequently, CIL has issued another notice dated 27.05.2019 regarding import substitution for the year 2019-20 also.

The total nos. of captive coal blocks that have been allocated to the Power Sector are 65 nos. Out of these 65 nos. coal blocks, 03 nos. coal blocks have been surrendered and the total 11 nos. of coal blocks are under production.

The Government in May, 2016 approved the proposal for allowing flexibility in utilization of domestic coal amongst power generating stations to reduce the cost of power generation through saving in the transportation cost and operating the most efficient plant. The State/Central Gencos have flexibility to utilize their coal in most efficient and cost effective manner in their own power plants as well as by transferring coal to other State Genco/Central Genco/IPP generating stations for generation of cheaper power.

In order to augment coal supply to thermal power plants in the country, Government of India has introduced New Coal Linkage Policy namely 'Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India' (SHAKTI)-2017 to provide coal linkages to thermal power plants in the country. The policy has provisions for granting coal linkages under various categories of power plants.

Efforts by NTPC to improve coal stock/coal supplies:

- Coal is being diverted under Government policy on 'Flexibility in utilization of domestic coal' to Critical stations to help avoiding Generation loss, Annual Fixed Charges (AFC) under Recovery and resulting in optimum utilization of coal available.
- NTPC has been allotted 10 coal blocks, out of which 3 coal blocks, namely Pakri-Barwadih, Dulanga and Talaipalli have started coal production.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

(Recommendations no. 16)

The committee note that Plant Load Factor (PLFs) of thermal power plants over the years have been decreasing. The Committee was also informed that in future the PLF is going to come down further due to increase in renewable energy capacity. It was further submitted that indication of lower PLF, not for a particular power plant, but as a country, will be a good signal that we are more developed and more self sufficient in the power sector rather than taking it as not performing. The Committee do understand that lower PLF may be indication of having adequate generation capacity, nevertheless, in the interest of the country in general and the end consumers in particular, it is imperative that the available resources are optimally utilized. As the Committee have observed in the preceding para that abundant generation capacity per-se does not guarantee supply of the required power. The Country still has peak shortage of 0.7% despite having more than enough generation capacity.

The Committee, therefore, are of the view that instead of focusing only on augmentation of generation capacities there should be some study/planning as to how utilization of thermal power plants are not much impacted by the present and upcoming renewable energy projects. The Committee, therefore, recommend that our efforts should not be targeted only to chase the peak demand but also to bring it down and even out the demand as far as possible so that optimum utilization of resources can be ensured. Further, as Pumped Storage Plants can be utilized as storage system for solar/ surplus power, the Ministry should make efforts to develop more and more of such projects.

The Committee has been emphasizing the need to develop and harness the huge untapped hydro power potential in the country. Since the Country have sufficient generation capacities in the present time, the Ministry should go for long term planning to develop the sector in a desired manner. It is, therefore, high time to go whole hog to develop hydro power projects which takes comparatively longer time but are the source of clean and cheaper energy in the long run. Its role in grid stability and use as peaking power, adds to its various other advantages.

REPLY OF THE GOVERNMENT

1. Considering the unique advantages of hydropower (including Pumped Storage projects) and the increasing critical need of hydropower for grid stability/ balancing in the light of planned integration of 440 GW of solar and wind (intermittent sources of power) into the grid, the government has targeted to add 30000 MW (Including about 7500 MW from Pumped Storage projects) of hydropower by the year 2030.CEA has also conducted a detailed study to determine the optimal energy mix till the year 2030 and as per the preliminary findings, the hydropower installed capacity should be about 73500 MW in the year 2030 considering technical requirements of the grid and commercial viability of the projects. To achieve this long term goal, the govt. has also framed a five year vision as shown below:

(In MW)				
2019-20	2020-21	2021-22	2022-23	2023-24
511	1575	2750	2303	5121

2. As hydropower sector has been going through a challenging phase with several projects stalled midway and with reluctance of Discoms to purchase hydropower (due to high tariff in the initial years, though cheaper in the long run) the Union Cabinet approved the following measures to promote hydropower in the country:

- Declaring Large Hydropower Projects (>25 MW) as Renewable Energy,
- Hydropower Purchase Obligation(HPO),
- Tariff rationalisation measures,
- Budgetary support for flood moderation component &
- Budgetary support for enabling infrastructure like bridges, roads etc.

The above measures will help in rationalization/reduction in tariff of Hydro Power Project and enable them to sign Power Purchase Agreements.

3. With the strong commitment of government to promote hydropower, the following positive developments have already taken place:

- Subansiri Lower (2000 MW), NHPC project in Arunachal Pradesh, which was stalled since December 2011, has been revived in July/ August 2019 after NGT clearance and after resolving of local issues. This is the largest hydropower project under construction in the country.
- Teesta – VI (500 MW), originally allotted to Lanco and had become a stressed project, was revived through NHPC's successful bidding during NCLT process. 1st stressed power project to be taken over by a CPSU. CCEA accorded investment approval for this project in March 2019

- Ratle (850 MW), originally allotted to GVK and was stalled, was revived in February 2019 through aMoU between NHPC, JKSPDC and Power Development Department (PDD) of J&K.
- Teesta – III (1200 MW) in Sikkim, originally allotted to Teesta Urja Pvt. Ltd and had become stranded, was revived and made a State PSU of Govt. of Sikkim and commissioned in 2017
- Kiru (624 MW), J&K- CCEA accorded investment approval in March 2019 and foundation stone laid in February 2019
- Rangit-IV (120 MW) project in Sikkim, which was stalled since October 2013, is being revived with NHPC emerging as the highest bidder in the NCLT bidding (Formal approval of NCLT yet to obtain).
- Two units (300 MW) of Kameng HEP were commissioned by NEEPCO in February 2020.
- Dibang Multipurpose Project (2880 MW), was accorded CCEA approval for pre-investment activities in July 2019. This is the largest ever hydropower project accorded approval in the country.

4. On the advice of the Union Govt., the State Governments also have been coming forward to revive hydropower sector. To make hydropower tariff viable, the States have started offering various concessions on case to case basis:

- Himachal Pradesh has also deferred free power, agreed for 50% reimbursement of State GST and for booking 1.5% LADF to any head other than project cost, BOOT/ BOOM for 70 years. Govt. of Himachal Pradesh signed agreements with 3 CPSUs viz. NTPC, NHPC and SJVN for setting up 11 hydropower projects of 3357 MW entailing an investment of about Rs. 32,000 crore.
- Jammu & Kashmir has deferred free power, exempted water cess for 10 years and have given exemptions from local taxes to Kiru and Kwar Projects.

5. Further, on 08.11.2019, the Government has also issued guidelines to reduce incidents of time and cost overruns, which is one of the most critical reasons for high tariff of hydropower projects in the initial years.

6. As regards NTPC, currently it has an 800 MW hydro plant operational in Koldam, Himachal Pradesh. Further, the details of its under-construction 640 MW hydro capacity are as under:

Sl.No.	State/Union Territory	Project	Capacity(MW)
1.	Uttarakhand	Tapovan Vishnugad	520
2.	West Bengal	Rammam-III	120

7. Further, NTPC has strengthened its position in hydropower sector by acquiring 100% shareholding of Government of India in THDC and NEEPCO in March 2020.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

CHAPTER III

OBSERVATION/ RECOMMENDATION WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE GOVERNMENT'S REPLIES

Nil

CHAPTER IV

OBSERVATIONS/ RECOMMENDATIONS IN RESPECT OF WHICH THE REPLIES OF THE GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE AND WHICH REQUIRE REITERATION

(Recommendation No. 3)

The Committee note that there is an elaborated monitoring mechanism under DDUGJY to ensure its proper implementation. At State level, a Committee under the Chairmanship of Chief Secretary is in place to monitor progress and resolve issues relating to implementation viz. allocation of land for sub-stations, right of way, forest clearance, railway clearance, safety clearance etc. At District level, District Development Co-ordination & Monitoring Committee namely DISHA (administered by Ministry of Rural Development) headed by senior most Member of Parliament (Lok Sabha) is in place to review and monitor implementation of central sector schemes including DDUGJY. At Central level, Inter-Ministerial Monitoring Committee on DDUGJY headed by the Secretary, Ministry of Power, Government of India also monitors implementation of scheme. Besides, progress is also reviewed with States/Power Utilities in Review, Planning and Monitoring (RPM) meeting of Ministry of Power. REC Limited, the nodal agency, monitors implementation of scheme through its Project Offices at field level. The Project Management Agency (PMA) appointed by Project Implementing Agencies (PIAs) assists them in implementation of projects in such activities which involves formulation of Detailed Project Report (DPRs), award of works, monitoring the progress, quality monitoring etc.

Despite all these mechanism in place, the Committee have been receiving feedback through Members of Parliament about the poor quality of work being done at the ground level. The main complaint in this regard is that despite pointing out to the poor quality of work, hardly any remedial measure is taken. The Committee, therefore, recommend that the Ministry should keep track of the meetings of the DISHA and get report/feedback on matters discussed therein pertaining to electricity sector especially schemes such as DDUGJY and IPDS. The Committee also expect the Ministry to take prompt and sincere action on such issues under intimation to the respective Member of Parliament.

REPLY OF THE GOVERNMENT

As per the Quality Assurance Mechanism established under the scheme, at first level; State Power Utilities carryout necessary quality checks including pre-despatch inspection of materials as well as quality of erection works in the field. At second level, the Nodal agency, REC Limited has also been entrusted with the responsibility to carryout pre-despatch quality inspection of materials and erection works in villages on random sample basis through third party agencies designated as REC Quality Monitoring Agencies (RQMs). The defects notified by quality monitoring agencies are forwarded to Project Implementing Agencies for rectification & corrective measures.

The status of quality assurance is regularly reviewed by the nodal agency and the Ministry with the States / Power Utilities and necessary directions are issued from

time to time in order to further improve the quality of materials as well as quality in erection works.

Apart from aforesaid Quality Assurance Mechanism, Ministry of Power, through REC, has imparted trainings to the frontline supervisors of State Power Utilities, Turnkey Contractors & Project Implementing Agencies (PIA) to improve quality of the works being executed under DDUGJY. In order to enforce quality in the DDUGJY works, payment to the PIAs is linked with defect rectification and other quality compliances.

In case of complaints from Public Representatives, a Committee/Team consisting of officials from REC, State Power Utilities, Project Implementing Agencies, Quality Monitors etc., is constituted to enquire into the matter and ensure redressal of the concerns raised.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

Comments of the Committee

(Please see Para No. 7 of Chapter – I of the Report

(Recommendations No. 4)

Saubhagya Scheme

The Committee note with satisfaction that Pradhan Mantri Sahaj Bijli Har Ghar Yojana- Saubhagya, a scheme to achieve universal household electrification by providing last mile connectivity and electricity connection to all remaining un-electrified households in rural and urban areas, has been a great success. All States declared electrification of all households as on 31st March, 2019 except 18,734 households in Left Wing Extremist (LWE) affected areas of Chhattisgarh. Since launch of Saubhagya, 2.63 crore households were electrified across the country up to 31st March, 2019. The Committee, considering the scale of work and the limited time period, feel that it was indeed a herculean task. The Committee appreciate the Ministry for taking this much needed initiative and also accomplishing it in a time bound manner. This scheme has special significance for this Committee as they have since long been persuading the Government to focus on electrification of all households instead of declaring a village electrified by providing electricity connection to households as few as 10% of that village.

The Ministry have stated that subsequently seven States namely Assam, Chhattisgarh, Jharkhand, Karnataka, Manipur, Rajasthan and Uttar Pradesh reported that there are 19.09 lakh un-electrified households which were earlier un-willing, and now willing to get electricity connection, identified before 31st March, 2019. The Ministry have further informed that States have been asked to electrify these household under Saubhagya by 31st December, 2019. It is also stated that out of these, 3.44 lakh households, have been electrified up to 27th September, 2019.

The Committee do understand that electrification of household is an ongoing process, however, the number of 'unwilling' households is too large to be a regular affair. This figure also vindicates the apprehension of this Committee that a sizeable number of households were left out of the scheme for whatever reasons. The Committee expect that the Ministry would carry on the good work without slowing

down its pace. The Committee, recommend that all the left out/now willing households be electrified within the targeted date of 31stDecember, 2019. The Committee also expect that the Ministry of Power with the help of State Government would run awareness programme and encourage people to get electricity connection under the scheme.

REPLY OF THE GOVERNMENT

The progress on household electrification is reviewed regularly by the nodal agency and the Ministry and the States / Power Utilities are advised to expedite the progress by promptly resolving the issues hampering the progress. Out of 19.09 lakh un-electrified households which were earlier un-willing and now willing to get electricity connection, 9.85 lakh households have been electrified up to 31.12.2019.

The matter has also been reviewed in the Review, Planning and Monitoring meeting with all States / Power Utilities held on 9th -10th January, 2020 and all concerned States / Power Utilities have been advised to accelerate the pace of releasing electricity connections to the remaining households to ensure electrification of all willing households at the earliest.

[Ministry of Power OM.No.10/1/2019-Budget Dated: 22/06/2020]

Comments of the Committee

(Please see Para No. 10 of Chapter – I of the Report

CHAPTER V

OBSERVATIONS/ RECOMMENDATIONS IN RESPECT OF WHICH THE FINAL REPLIES OF THE GOVERNMENT ARE STILL AWAITED

Nil

NEW DELHI
18th March, 2021
Phalguna 27, 1942 (Saka)

Rajiv Ranjan Singh *alias* Lalan Singh,
Chairperson,
Standing Committee on Energy

APPENDIX –I

MINUTES OF THE EIGHTH SITTING OF THE STANDING COMMITTEE ON ENERGY (2020-21) HELD ON 18th MARCH, 2021 IN COMMITTEE ROOM '2', PARLIAMENT HOUSE ANNEXE EXTENSION, NEW DELHI

The Committee met from 1500 hrs. to 1535 hrs.

Shri Rajiv Ranjan Singh alias Lalan Singh - Chairperson

LOK SABHA

2. Kumari Shobha Karandlaje
3. Shri Ramesh Chander Kaushik
4. Shri Ashok Mahadeorao Nete
5. Shri Parbatbhai Savabhai Patel
6. Shri Dipsinh Shankarsinh Rathod
7. Shri N. Uttam Kumar Reddy
8. Shri Shivkumar Chanabasappa Udasi

RAJYA SABHA

9. Shri T.K.S. Elangovan
10. Shri Maharaja Sanajaoba Leishemba
11. Shri Jugalsinh Mathurji Lokhandwala
12. Dr. Sudhanshu Trivedi
13. Shri K.T.S. Tulsi

SECRETARIAT

1.	Shri R.C. Tiwari	-	Joint Secretary
2.	Shri R.K. Suryanarayanan	-	Director
3.	Shri Kulmohan Singh Arora	-	Additional Director
4.	Smt. L.N. Haokip	-	Deputy Secretary

2. At the outset, the Chairperson welcomed the Members and apprised them about the agenda of the sitting. The Committee then took up the following ten draft Reports for consideration and adoption:-

a) Report on Action-taken by the Government on the recommendations contained in the 28th Report (16th Lok Sabha) on 'National Solar Mission-An Appraisal';

b) Report on Action-taken by the Government on the recommendations contained in 37th Report (16th Lok Sabha) on Stressed/Non-performing Assets in Power Sector';

c) Report on Action-taken by the Government on recommendations contained in 40th Report (16th Lok Sabha) on 'Impact of RBI's Revised Framework for Resolution of Stressed Assets on NPAs in the Electricity Sector';

d) Report on Action-taken by the Government on recommendations contained in 42nd Report (16th Lok Sabha) on 'Stressed/Non-Performing Assets in Gas based Power Plants';

e) Report on Action-taken by the Government on the recommendations contained in the 43rd Report (16th Lok Sabha) on 'Hydro Power'; and

f) Report on Action-taken by the Government on the recommendations contained in the 1st Report (17th Lok Sabha) on Demands for Grants (2019-20) of the Ministry of New and Renewable Energy;

g) Report on Action-taken by the Government on the recommendations contained in the 2nd Report (17th Lok Sabha) on Demands for Grants (2019-20) of the Ministry of Power;

h) Report on Action-taken by the Government on the recommendations contained in the 3rd Report (17th Lok Sabha) on Demands for Grants (2020-21) of the Ministry of New and Renewable Energy'.

i) Report on Action-taken by the Government on the recommendations contained in the 4th Report (17th Lok Sabha) on Demands for Grants (2020-21) of the Ministry of Power.

j) Report on the subject 'Action Plan for achievement of 175 Gigawatt (GW) Renewable Energy Target'.

3. After discussing the contents of the Reports, the Committee adopted the aforementioned draft Reports without any amendment/modification. The Committee also authorized the Chairperson to finalize the above-mentioned Reports and present the same to both the Houses of Parliament in the current Budget Session.

The Committee then adjourned.

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APPENDIX II

(*Vide Introduction of Report*)

ANALYSIS OF ACTION TAKEN BY THE GOVERNMENT ON THE OBSERVATIONS/ RECOMMENDATIONS CONTAINED IN THE SECOND REPORT (17TH LOK SABHA) OF THE STANDING COMMITTEE ON ENERGY

(i)	Total number of Recommendations	16
(ii)	Observations/Recommendations which have been accepted by the Government:	
	Sl.Nos. 1,2,5,6,7,8,9,10,11,12,13,14,15 and 16	
	Total: Percentage	14 87.5%
(iii)	Observations/Recommendations which the Committee do not desire to pursue in view of the Government's replies:	
	Nil	
	Total: Percentage	00 0%
(iv)	Observations/Recommendations in respect of which the replies of the Government have not been accepted by the Committee and which require reiteration:	
	Sl.Nos. 3 and 4	
	Total: Percentage	02 12.5 %
(v)	Observations/Recommendations in respect of which final replies of the Government are still awaited:	
	Nil	
	Total: Percentage	00 00%