

# **MINISTRY OF POWER**

[Action Taken on the recommendations contained in the Twenty-Sixth Report (16<sup>th</sup> Lok Sabha) on Demands for Grants of the Ministry of Power for the year 2017-18]

# **TWENTY-NINTH REPORT**



# LOK SABHA SECRETARIAT NEW DELHI

August, 2017/Shravana, 1939 (Saka)

# **TWENTY-NINTH REPORT**

STANDING COMMITTEE ON ENERGY (2016-17)

(SIXTEENTH LOK SABHA)

# **MINISTRY OF POWER**

[Action Taken on the recommendations contained in the Twenty-Sixth Report (16<sup>th</sup> Lok Sabha) on Demands for Grants of the Ministry of Power for the year 2017-18]

Presented to Lok Sabha on 10.8.2017

Laid in Rajya Sabha on 09.8.2017





# LOK SABHA SECRETARIAT NEW DELHI

August,2017/Shravana, 1939 (Saka)

**COE NO. 288** 

Price: Rs.

# © 2017 by Lok Sabha Secretariat

Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha (Sixteenth Edition) and Printed by

# CONTENTS

COMPOSITIO	N OF THE COMMITTEE (2016-17)	ii
INTRODUCTI	ON	iv
	Report	1
CHAPTER II	Observations/ Recommendations which have been accepted by the Government	8
CHAPTER III	Observations/Recommendations which the Committee do not desire to pursue in view of the Government's replies	43
CHAPTER IV	Observations/ Recommendations in respect of which replies of Government have not been accepted by the Committee and require reiteration	44
CHAPTER V	Observations/ Recommendations in respect of which final replies of the Government are still awaited	49
	ANNEXURE	
I	Station wise % PLF of COAL based stations for 2016-17 and 2015-16 APPENDICES	50
I	Minutes of the Sitting of the Committee held on 4th August, 2017	55
II	Analysis of Action Taken by the Government on the Observations/ Recommendations contained in the 26 <sup>th</sup> Report (16 <sup>th</sup> Lok Sabha) of the Standing Committee on Energy.	57

# COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2016-17) LOK SABHA

# Dr. Virendra Kumar- Chairperson

2.	Shri Sultan Ahmed
3.	Shri Om Birla
4.	Shri M. Chandrakasi
5.	Shri Ashwini Kumar Choubey
6.	Shri Harish Chandra alias Harish Dwivedi
7.	Shri Deepender Singh Hooda
8.	Shri Bhagat Singh Koshyari
9.	Dr. Arun Kumar
10.	Kunwar Sarvesh Kumar
11.	Shri Malyadri Sriram
12.	Shri R.P. Marutharajaa
13.	Dr. Pritam Gopinath Munde
14.	Shri Jagdambika Pal
15.	Shri Ravindra Kumar Pandey
16.	Shri M.B. Rajesh
17.	Shri Vinayak Bhaurao Raut
18.	Shri Gutha Sukhender Reddy
19.	Shri Conrad Kongkal Sangma
20.	Shri Devendra Singh <i>Alias</i> Bhole Singh
21.	Shri Bhanu Pratap Singh Verma
	RAJYA SABHA
22.	Shri T.K.S. Elangovan
23.	Shri Oscar Fernandes
24.	Shri Ram Jethmalani
25.	Shri La. Ganesan
26.	Shri Javed Ali Khan
27.	Dr. Prabhakar Kore
28.	Shri Shamsher Singh Manhas
29.	Shri S.Muthukaruppan
30.	Dr. Anil Kumar Sahani
31.	Shrimati Viplove Thakur

(ii)

# SECRETARIAT

1.	Shri A.K. Singh	Additional Secretary
2.	Shri N.K. Pandey	Director
3.	Smt. L. Nemjalhing Haokip	Under Secretary

(iii)

## INTRODUCTION

I, the Chairperson, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this Twenty-Ninth Report on the action taken by the Government on the recommendations contained in Twenty-Sixth Report of the Standing Committee on Energy on Demands for Grant (2017-18) of the Ministry of Power.

2. The Twenty-Sixth Report was presented to the Lok Sabha on 10th March, 2017 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 7th June, 2017.

3. The Report was considered and adopted by the Committee at their sitting held on 4the August, 2017.

4. An Analysis on the Action Taken by the Government on the recommendations contained in the Twenty-Sixth 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 <u>04 August, 2017</u> Shravana 13, 1939 (Saka) Dr. Virendra Kumar, Chairperson, Standing Committee on Energy

(iv)

7

# CHAPTER - I

This Report of the Standing Committee on Energy deals with the action taken by the Government on the Recommendations/Observations contained in their Twenty-sixth Report (Sixteenth Lok Sabha) on the Demands for Grants of the Ministry of Power for the year 2017-18.

2. The Twenty-sixth Report was presented to Lok Sabha on 10th March, 2017 and was laid on the Table of Rajya Sabha on the same day. The Report contained 21 Recommendations/Observations.

3. 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.1,2,3,4,5,6,7,8,9,10,11,12,13,16,17,19,20 and 21 Total -18 Chapter-II Recommendation/Observation which the Committee do not desire (ii) to pursue in view of the Government's replies: Nil Total - 00 Chapter-III Recommendations/Observations in respect of which the replies of (iii) the Government have not been accepted by the Committee and which require reiteration:

Serial Nos. 14, 15 and 18

Total-03

Chapter-IV

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

Nil

Total - 00

Chapter-V

4. The Committee desire that Action Taken Notes on the Recommendations/Observations/Comments contained in Chapter-I of the Report may be furnished to the Committee within three months of the presentation of this Report.

5. The Committee will now deal with action taken by the

Government on some of their Recommendations that require reiteration or

merit comments.

# **Development of Power Sector**

# (Recommendation SI. No. 14, Para No. 2.14)

6. The Committee have noted a massive power capacity addition in the recent years due to which it was on the verge of becoming a power surplus country. The Ministry had also assured that considering the power projects in pipeline, they were expecting the demand of 2021-22 would be fully met. The Committee had also noted that against the requirement of 864.9 BU, the availability of power remained 858.8 during the year 2016-17 (upto Dec. 2016) leaving a shortage of 0.7%. In respect of peak demand, 1,56,934 MW was met against the demand of 1,59,542 MW leading to a The Committee were surprised that even after the shortage of 1.6%. massive capacity addition and huge present generation capacity, there was still shortages, though their quantum is not so significant. Secondly, in addition to these power demands there exists the latent demand that is not being taken into calculation. These figures do not include the demand that several financially distressed Discoms do not post due to their inability to purchase electricity at higher rates and instead of incurring further losses they opt for power outages. The demand calculation has also not taken into account the demands of households which do not have electricity access. While appreciating the power generation sector as it has come a long way and now is in a position to cater the demand of power of the country, the Committee had desired that the momentum of growing generation should be maintained to cater the increased future demand as well as the latent demand of electricity of country which is going to surface sooner than later. The Committee had also recommended that the Government should encourage installation of power generation projects which are clean and green, strategically important and capable of providing electricity at lower tariff.

7. The Ministry of Power, in their Action Taken Reply, has stated as under:

"It may be submitted that 0.7% shortage in terms of energy in the country is not due to non-availability of power in the country. A number of thermal power plants in the country are under reserve shutdown and those in operation are running at low PLF due to less requisition of power by the DISCOMs in a few states. Therefore, adequate power is available in the country but it is learnt that DISCOMs give less requisition of power as they are unable to supply additional power to their consumers due to constraints in their transmission/distribution network. Some DISCOMs are unable to purchase additional power due to financial constraints. Even in those states, where there are no such constraints, forced outage of a transmission line/distribution feeder/ distribution transformer leads to load-shedding in some areas until restoration of such elements. The quantum of electricity which could not be supplied to the consumers due to such instances also reflects in power supply position as shortage, which actually is the demandsupply gap due to forced outage of transmission/distribution element and not due to shortage of power".

8. The Committee are informed that adequate power is available in the country and is not short of power. However, Discoms give less requisition of power as they are unable to supply additional power to their consumers due to constraints in their transmission/ distribution network and some Discoms are unable to purchase additional power due to financial constraints. The reply of the Government suggest that adequate power is available in the country and forced outage of the transmission line/ distribution feeder/ distribution transformer leads to load-shedding in some areas. The quantum of electricity which could not be supplied to consumers due to such instances also reflects power supply position as 'shortage'. The recommendation of the Committee focuses on the latent demands of electricity which is not being taken into calculation, non-requisition of electricity due to financial reasons by the Discoms, un-electrified households and possible increase in the future demands, etc. The recommendation of the Committee is different from the reasons given by the Government regarding situation of power generation. Therefore, the Committee would like to reiterate their recommendation that the

10

Government should encourage installation of power generation projects which are clean and green, strategically important and capable of providing electricity at lower tariff.

# (Recommendation SI. No. 15, Para No.2.15)

9. The Committee have noted that the plant load factors (PLF) of thermal power plants had touched a record low and dipped below 60% during the previous year 2016-17. The Committee have also noted that there were several power plants that are running at 0-40% of PLF. They were also informed that due to huge upcoming renewable energy capacity, it is possible that the PLF of thermal power plants could go as low as 50% or even below. Since solar energy will be available in the day time so thermal power plants will have to be shut down or run at low capacity at that time. The committee felt that this is not the desired scenario as it is known that underutilization of power plant will only lead to higher tariff rates. The committee do understand that setting up power stations is a de licensed activity, so everybody is free to install power stations as per their need or business prospect. In a free business model, it is also understood that only those power plants will survive which will be able to sell electricity at cheaper rate and thus bringing competitiveness in the market. The Committee were astonished that despite abundance of power generation capacity in the country, the tariff rates have not gone down, rather there is a increasing trend in this regard. Even the technological advancement of machinery, use of super critical technology. ease in supply constraints of coal have failed to lower tariff rates. The Committee were of the opinion that the prime reason for higher tariff is lower PLF. The Committee have been apprised that though the tariff is higher for long term PPA, electricity is available in power exchanges at much lower price. This situation encourages Discoms not to go for a long term PPA, but fulfil their demand by short term power purchases as much as possible. The Committee felt that prima facie the situation might appear beneficial for Discoms/ power sector but may have long term adverse consequences. The power sector seems to be trapped in a vicious cycle of low PLF causing high tariff and high tariff suppressing the demand. The Committee were concerned that if this situation persist this may lead to plethora of problems viz. Shutting down of power plants due to economical un-viability, loans turning bad and further investment in the sector may be discouraged due to low returns. As such, the Committee were in favour of promoting competition in the sector that should lead to availability of cheaper power, those who will be able to do this will survive while rest will perish. The Committee had however, desired that the Ministry should ensure that this transition should take place without harming and discouraging further investment in the power sector.

10. The Ministry of Power, in their Action Taken Reply, has stated:

"At present, majority of the power procured by Discoms is on the basis of long term PPAs with two-part tariff and only small part of the power requirement is being procured through market. Thus, payment of fixed charges to a power station under long-term PPA depends on availability and not on actual energy generated. A system in which entire wholesale market for electricity is based on competition would require major changes in legal and regulatory framework".

11. The Committee note that the response of the Government is not as per the spirit of the recommendation. The Committee highlighted that power sector seems to be trapped in a vicious cycle of low PLF causing high tariff and high tariff suppressing demand. This situation will lead to problems like shutting down of power plants, loans turning bad and a discouraging atmosphere for investment due to low return. The reply of the Government revolves around payment and its analysis under long-term PPA. The Committee further emphasis for promotion of competition in the sector that may lead to availability of cheaper power and also that transition should happen without harming and discouraging further investment in the power sector. As the response of the Government is evasive, the Committee would like to reiterate its recommendation that the Ministry should ensure that this transition should take place without harming and discouraging further investment in the power sector.

# (Recommendation SI.No. 18, Para No. 2.18)

12. The Committee have noted that there are two most prevalent methods for discovering the tariff in the power sector (i) cost Plus Tariff and (ii) tariff by competitive Bidding of which Cost plus system is pre-dominant. The committee were aware that in this method coal charges consists around 70 per cent of the total cost of power for tariff determination. They are termed as energy charges whereas rest of the tariff consist of fixed charges and other miscellaneous ingredients. The Tariff Policy as announced by the government of India aims at promoting competitive bidding for all acquisitions in power plants and also for tariff determination through competitive bidding. Competitive bidding process ensures that the tariff determination process is reasonable, rational and competitive without any scope for latent

12

maneuvering. The process also ensures that all the expenditure are taken into account and this is beneficial to consumer as well as to the generator. The transparency in the system also forms part of this process and thus leaving no scope for any extraneous consideration. The committee were unable to apprehend as to why hydro sector has been kept out of its ambit particularly when the tariff policy aims to make entire system in the electricity sector completion based. There may be good reasons to exclude the hydro sector from the competitive bidding process, but there are equally genuine reasons for including it within the competitive ambit to make it efficient, transparent and delivery oriented. Several countries like United Kingdom and Brazil have taken hydro into the competitive fold and are doing excellent. The committee, had therefore, recommended that the price discovery for any kind of electricity whether thermal, hydro, renewable, etc., should be done through process of competitive bidding only.

13. The Ministry of Power, in their action Taken reply, has stated as under:

"The Tariff Policy 2016 provides that barring certain exceptions, all future requirement of power should continue to be procured competitively by distribution licensees. As far as Renewable is concerned, solar parks are already being set up through competitive bidding and this process has started for wind generation also. However, tariff for waste-to-energy plants shall be determined on cost-plus basis.

The hydro-electric power plants face significant uncertainty during construction, particularly in the Himalayan region. In addition, the problem of R&R, law & order, land acquisition etc. are much more severe in case of hydro-electric projects as compared to other type of projects. In spite of necessary investigations prior to commencement of construction, many a times geological surprises are encountered which often lead to delay as well as increase in project costs. In view of this, bidders may not be able to assess their costs and resulting tariff with reasonable certainty. If hydro projects are subjected to competitive bidding, bidders would factor-in a risk premium in the tariff quoted, leading to discovery of higher tariff. In view of this, hydro projects have been granted exemption from competitive bidding subject to certain conditions in the Tariff Policy, 2016".

14. The Committee note that the development of hydro sector is a bit lengthy and cumbersome. Problems afflicting the sector are also manifold. While recommending that price discovery for all kinds of electricity should be done through process of competitive bidding, the Committee were well aware about the reasons which have been cited for risk premium in the tariff to be quoted during the bidding. Another aspect which should be taken into account is that if the route of competitive bidding for hydro sector is taken recourse to, all the factors hampering expeditious growth of hydro in the country will be addressed beforehand by the Government or the other concerned agencies. This will force the Government machinery to take all necessary measures to put in place the solutions to the problems (whether virtual or real). Only thereafter, any serious and necessary bidding can take place for the hydro sector. This will also eliminate the future uncertainties like R&R, law & order, etc. The Committee, therefore, would like to reiterate its recommendation that the price discovery for any kind of electricity whether thermal, hydro, renewable, etc., should be done through process of competitive bidding only.

## **CHAPTER II**

# **OBSERVATIONS/ RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT**

Status of implementation of the recommendations of the Committee contained in Twenty sixth Report, under Direction 73A of the 'Directions by the Speaker'.

## **Annual Plan Outlay**

## (Recommendation Sl. No. 1, Para No. 2.1)

The Committee note that the Ministry of Power had sought Rs. 22,769.39 crore from the Ministry of Finance for the year 2017-18, however, it has been allocated Rs.13,881 crore. Against the demand of Rs. 6,010.11 crore, Indian Power Development Scheme (IPDS) has been allocated Rs. 5,821.22 crore. Energy Conservation has been allocated only Rs. 50.54 crore against the demand of Rs.332.86 crore. Similarly, Central Power Research Institute (CPRI)'s demand of Rs.250 crore has been reduced to Rs.150 crore. Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), the most important scheme of the Ministry of Power, has suffered the most severe cut and allocated only Rs.4,841 crore against the demand of Rs.12,602 crore. The Committee are concerned over the severe budgetary cut in important programmes of the Ministry of Power in general and DDUGJY in particular. When the Government is committed to provide electricity access to all the households of the country and 24x7 uninterrupted power supply, these huge budgetary cuts appear neither logical nor justified. The Committee do understand the constraints of limited finance resources of the Government, nonetheless, important sector should get adequate fund. At present, power sector is most crucial sector, which is slowly but surely passing through transition period of energy deficiency to energy sufficiency and universal electricity access. However, when the Committee scrutinized the current year's demand, it found that in previous year also the Ministry of power had posted a demand of Rs.31,519.84 crore, which was reduced to Rs. 12,200 crore by the Ministry of Finance. However, even this truncated allocation was reduced at the stage of RE Rs. 10,413.66. And finally, only Rs. 7,259.32 crore were utilized till 30.01.2017. The reduction of budget at RE stage indicates that the Ministry was not prepared to utilize even the fund that was allocated to them. The Committee, therefore, infer that the budgetary cut by the Ministry of Power was based on the previous year's utilization of fund by the Ministry of Power and not on any priority. Nonetheless, the Committee strongly recommends that the Ministry of Finance should allocate additional fund at the stage of RE, if the Ministry of Power demands so. Simultaneously, the Committee also recommend the Ministry of Power to try and utilize the fund allocated as per their original demand and schedule so that

not only the fund are fully utilized but targets under various schemes are also achieved.

### **Reply of the Government**

Ministry of Power appreciates and is thankful to the Hon'ble Committee for their concern over the budgetary cut in important programmes of MOP and their recommendation that the Ministry of Finance should allocate additional funds at the RE stage, if MOP demands so.

In this regard it is submitted that against the RE (2016-17) plan allocation of Rs. 10,413.65 crore during FY 2016-17, an amount of Rs.9463.93 crore has been disbursed as on 31.03.2017. It is further submitted that out of BE 2017-18 allocation of Rs. 13881.14 crore a sum of Rs. 884.30 crore has already been disbursed as on 31.05.2017. A detailed assessment of utilisation of funds under various schemes and additional requirements, if any, will be made at the time of discussion on Revised Estimates and demands for additional funds will accordingly be placed before the Ministry of Finance.

[Ministry of Power O.M.No.10/2/2017-Budget Date7/6/2017]

#### (Recommendation Sl. No. 2, Para No.2.2)

The Committee note that during the year 2016-17, some important heads have very poor utilization of fund. NEEPCO, against their budgetary estimation of Rs.166.13 crore, they could spend nothing. Similarly, no fund could be utilized under the head of strengthening transmission system in the States of Arunachal Pradesh and Sikkim and Power System Improvement Project in North-East Region. Very less utilization of fund took place under the Heads of CPRI, Energy Conversation, Integrated Power Development Scheme and PSDF. The poor utilization of fund by NEEPCO, a CPSU engaged in development of hydro-power projects, is also a cause for concern despite the fact that for the 12<sup>th</sup> Plan period they have exceeded the target. CPRI Energy Conservation and Efficiency Programme help in mitigating the burden of higher tariff by lowering electricity consumption through technological advancements and other methods. IPDS, PSDF Transmission System and Power System Improvement are equally important. The Committee, therefore, express their concern over the poor utilization of fund under these heads during the current year. Considering the importance of these programmes, the committee recommend that the Ministry should ensure that the fund allocated to them this year, i.e., 2017-18 are not only fully utilized but efforts should be made to clear backlog of previous year.

## **Reply of the Government**

The recommendation of Committee has been noted for compliance. As stated in reply to para number 2.1 above, the additional demand of funds would be assessed at the RE stage during the current financial year. Further, the Ministry will also ensure that the backlog of previous year, if any, is cleared and funds allocated to the Ministry is fully utilized.

[Ministry of Power F. No.10/2/2017- Budget Date7/6/2017]

## <u>12<sup>th</sup> Five Year Plan</u>

## (Recommendation Sl. No. 3, Para No.2.3)

The Committee note that an outlay of Rs. 4,40,795.84 crore was allocated for the 12<sup>th</sup> Plan Period. Rs. 3,86,516.68 crore were Internal and Extra Budgetary Resources (IEBR) from the above allocation. The IEBR was to be raised by CPSUs themselves. The 12<sup>th</sup> Plan period is on its way out and the performances of the most of the CPSUs have been very poor in achieving their financial targets. The NTPC could achieve only Rs.1,10,232 crore against the target of Rs.2,19,612 crore. Similarly, the performance of NHPC was only Rs.13,853 crore against the target of Rs.29,368 crore. The THDC could achieve Rs.3,464 crore against the target of Rs.7,298 crore, whereas, SJVNL achieved Rs.3,372 crore against the target of Rs.10,400 crore. Only the performance of Power Grid is praise-worthy as they not only achieved the financial target, but also exceeded it. Similarly, the performance of NEEPCO has also been commendable. In all, the CPSUs are the best equipped organization in the electricity sector. This kind of performance from them cannot be justified for any reasons whatsoever. The Committee, therefore, strongly recommend that:-

(i) The reasons for failure of CPSUs in achieving the assigned targets during the 12<sup>th</sup> Five Year Plan should be explained PSU-wise.

(ii) Steps should be taken to avoid recurrence of reasons responsible for decline in the performance of the CPSUs.

(iii) Responsibility for non-achieving the target should also be fixed as the entire tenure of five years is a sufficient period for showing results and any laxity in performance in a year can be overcome during the next year with dedication and sincerity.

# **<u>Reply of the Government</u>**

(I) The reasons for shortfall in achieving the assigned targets during the  $12^{th}$  Five Year Plan, are given below:-

# (A) NTPC

The reasons, project wise, for shortfall are:.

Projects		ects	Reasons			
Availat	Gas ble	Not	Shortfall of Rs.9,316 crores			
Gandhar Gas- II		Gas- II	. The plants are gas based projects and due to the problems of			
(2x 650 MW)		(W)	availability of gas in required measure, these projects had to be kept on hold till the situation improved. To revive and improve utilization of the Stranded/stressed gas based power projects in the country, Government of India has			
Kawas Gas –II		as –II				
(2x 650 MW)		(W)	approved a policy mechanism to use Imported Re-gasified Liquified National Gas for			
CCPP-I	Rajiv II	Gandhi	supply to such gas based plants. [please add the current status of the availability of gas. The original response stopped at placing the ball in Ministry's court without saying why the ministry did so and what steps have been taken after			
(3x 350 MW)		(W)	2016 in the execution of the project. ]			

Investment Approval Delayed	Shortfall of Rs.28,119 crore
Bulk Tendering   -I   (660 MW-SG)   Mauda-II(2x 660   MW), Solapur (2x 660   MW), Nabinagar(3x 660   MW), Meja(2x 660   MW), Meja(2x 660   MW) & Raghunathpur   (2x 660 MW) (of DVC)	NIT for the package issued on 23.06.10 and Bidding documents were on sale from 28.06.2010 to 30.07.2010. Bid Opening for Stage-I (Techno- Commercial) was held on 25.08.10. Stage-I (Techno-Commercial) Evaluation Report approved on 05.01.2011. One of the bidder M/s Ansaldo Caldaie Boilers India Pvt Ltd. who was not considered qualified, filed a writ petition in the High Court of Delhi. Subsequent to the hearings in the matter, the court passed its order on 01.03.2011 against NTPC wherein High Court (HC) ordered NTPC to allow Ansaldo in accordance with the terms of the bid documents, not only to proceed to the next stage i.e., Stage-II (Price) Bid, but also permit it to participate in the technical discussions. Special Leave Petition (SLP) was filed by NTPC in Supreme Court (SC) on 09.03.2011. After various hearings and postponement the Hon'ble Supreme Court delivered its judgment on 16.02.2012 in NTPC's 19avour. The Stage-II (Price) bids were opened on 29.02.2012. The Award of Steam Generator (SG) Package of were progressively done from 30.03.2012 onwards.
Bulk Tendering   -I (660 MW-STG)   Mauda-II(2x 660   MW), Solapur (2x 660   MW), Nabinagar(3x 660   MW), Meja(2x 660   MW) &   Raghunathpur(2x 660   MW) (of DVC)	NIT was issued on 16.10.2009 & Stage-I OBD done on 12.02.2010. Invitation for Stage-II bids sent on 18.08.2010 (Delay was due to evaluation of L&T for which legal opinion was sought. Legal opinion received on 13.05.2010. Based on legal opinion further documents sought from L&T. L&T Bid was rejected due to modifications in Joint Deed of Undertaking(JDU)). Stage-I Evaluation approved on 16.08.2010. L&T filed a Writ Petition on 5 <sup>th</sup> September, 2010 before Hon'ble High Court of Delhi and subsequently filed a Special Leave Petition (SLP) which was taken up for hearing on 7 <sup>th</sup> October, 2010 in Hon'ble Supreme Court against their rejection. However, their application filed for interim relief in the Writ and the SLP were dismissed by the Hon'ble High Court of Delhi and Hon'ble Supreme Court on 14 <sup>th</sup> September, 2010 and 25 <sup>th</sup> October, 2010 respectively.

	Stage-II OBD was done on 08.10.2010.
	Due to the delay in finalization of SG Package, the Investment Approval could not be accorded.
	The Award of Steam Turbine Generator (STG) Package was progressively done from 23.04.2012 onwards.
Bulk Tendering –II (800 MW) SG Package	NIT for the package was issued on 04.02.2011 and Bidding documents were on sale from 07.02.2011 to 07.03.2011.
Darlipalli (2x 800 MW), Gadarwara (2x 800 MW), Lara(2x 800 MW), Kudgi (2x 800 MW)	Bid Opening for Stage-I(Techno-Commercial) was scheduled to be opened on 20.04.2011. However, based on the requests from prospective bidders, the last date for receipt of bids and Bid opening was extended twice and bids were opened on 01.06.2011.
	Stage-I (Techno-Commercial) Evaluation Report approved on 24.08.2011. Stage-II (Price) Bid opened on 14.09.11 and subsequent to evaluation of Stage-II (Price) Bid discussion for price matching and various post-bid tie-ups was done.
	Award Recommendation for subject package was approved on 29.11.2011 & Notification of award was to be placed after receipt of Investment Approval subsequent to Environment Clearance (EC) and physical possession of Land for Main Plant.
	NOA for Kudgi Project was placed on 17.02.2012 (Environment Clearance was received on 25.01.2012 and Land for Main Plant was also available).
	NOA for Lara Project placed on 13.12.2012 for SG package. (Environment Clearance received on 13.12.2012 and Land for Main Plant was available).
	NOA for Gadarwara project placed on BHEL on 22.03.2013 in substitution of Gajmara project.
	NOA for SG package for Darlipalli project was placed to BHEL on 17.02.2014 (Environment Clearance was received on 17.02.2014 and Land for Main Plant was also available).
Bulk Tendering –II (800 MW) STG Package	NIT issued on 04.02.2011, Stage-I OBD done on 03.06.2011. Stage-II Invitation issued on 25.08.2011 & Stage-II OBD done on 15.09.2011.

Darlipalli (2x	Stage-II Report put up on 21.09.2011 and approved on 27.10.2011
800 MW), Gadarwara (2x 800 MW), Lara(2x 800 MW), Kudgi (2x 800 MW)	Award of STG Package for Lara and Darlipalli on BGR, STG Package for Gajmara on BHEL and STG Package for Kudgi on Toshiba JSW Turbine & Generator Private Limited on 29.11.2011 was finalised subject to Investment approval subsequent to Environmental clearance and physical possession of land for Main Plant of respective Projects.
	Environmental Clearance for Kudgi issued on 25.01.2012 (Award to be placed along with SG as per approval). NOA placed on 17.02.2012.
	Environmental Clearance for Lara issued on 13.12.2012. NOA placed on 13.12.2012.
	NTPC Board on 28.12.2012 approved the proposal for substitution of Gajmara to Gadarwara subject to clearance from Member (Energy), Planning Commission. Approval from Planning Commission received through Ministry of Power vide letter dated 18.02.2013. Environmental clearance received vide letter dated 22.03.2013. NOA placed on 22.03.2013.
	NOA for Darlipalli project could not be issued in absence of Investment Approval, Environment Clearance and physical possession of Land for Main Plant. BGR refused to extend validity of their bid beyond 09.03.2013. NTPC on 25.06.2013 resolved the proposal for invitation of fresh bids for STG Package for Darlipalli.
	Fresh bids invited on 18.09.2013 and award placed on 17.02.2014 on Toshiba JSW.
Projects Not awarded yet	Shortfall of Rs.57,174 crore
Barethi Super Thermal Power Station (4x 660 MW + 2x 660 MW)	Captive Coal block (Banai) allocated in Mar'15. Since the block was unexplored, the EC & FC for the project could not be taken up by MoEF. NTPC had sought bridge linkage for the project. Standard Linkage Committee has recommended the same in its meeting dated 18.03.2016. Formal linkage awaited.
Gajmara Super Thermal Power Station	Coal linkage was not available. Further signed PPA for the project not yet received. Hence project not being pursued.
Katwa Thermal Power Project	Coal Linkage for the project was not available. Govt. of West Bengal offered coal from its share of Deocha Pachami coal block and sought approval
(2x 660 MW)	from MoC, which is awaited.

Lalam Koduru (Previously Pudimadaka) Vishakapatnam TPS	NTPC proposed use of imported coal. Environmental clearance got delayed as various inputs were sought. Delay also in finalizing the site by the State government. Project further delayed since State govt. has sought views on developing the project with domestic Coal instead of imported coal.
(4x 1000 MW)	
Projects Scrapped	Shortfall of Rs.26,646 crore
Badarpur Exp (3x 350 MW)	Gas Projects were kept under hold in line with the communication issued by MoP dated 14 <sup>th</sup> March, 2012 stating that " <i>Developers are advised not to plan projects based on domestic gas till 2015-16</i> ". Project cannot be taken up without gas availability.
Dhuvran Thermal Power Station (2 x 660 MW + (1 x 660 MW)	NTPC wanted to develop project on imported coal considering in long transportation requirements for domestic coal. The same was not agreed to Govt. of Gujarat and they conveyed that the project shall be developed by them.
Gidderbaha Thermal Power Station (4x 660 MW)	Project could not be taken forward due to non-availability of coal. Further, the cost would be very high, since it would involve coal transportation over long distance.
Khasiabara HEPP (3 x 87 MW)	Forest clearance was not accorded and the project had to be scrapped.

# (B). THDC

The reasons, project wise, for shortfall are :

# (i) **Tehri PSP(1000 MW)**

In 1000 MW Tehri PSP, progress of the Project initially hampered due to non finalization of lay out of power house by the EPC Contractor and due to poor geology encountered near the farthest end of Power House. Subsequently stoppage of works by the villagers at Asena Quarry and dumping area in Chopra Village stalled the works. Progress had been slow due to poor geology being encountered which was in variance to GBR (Geotechnical Baseline Report) made in beginning. Ban imposed by the Distt. Administration on quarrying from Asena Quarry and dumping area being main reasons for delay:

Other factors include:-

- Regular hindrances in Chopra dumping area by the local population.
- Delay in diversion case of 4.668 Ha. Forest Land for dumping area at Village Chopra.
- Variation in geological conditions (Class IV & V rocks) encountered at Site from the GBR provided in the contract, stabilization measures and construction methodology had to be changed, requiring extensive support system in structures.
- Slow progress coupled with monthly contractual recovery of advances led to poor fund flow of the Civil Works contractor M/SHCC.

# (ii) Vishnugad Pipalkoti HEP (444 MW)

In 444 MW Vishnugad Pipalkoti Hydro Electric Project in Uttarakhand; due to delay in Stage-II Forest Clearance (non transfer of 80.507 ha Forest Land), Contract for the main works could not be awarded. After issuance of G.O. by GoUK on 6<sup>th</sup> Dec,2013, the main Civil Works could be awarded on 19.12.2013.

# Other factors include:-

- Law and Order Problem: The work progress at various fronts hampered due to frequent stoppage of works by the local pressure groups demanding employment and petty contracts. Since award of the work in Jan, 2014, the work was stopped at various occasions at very close intervals.
- Geological Variations: Poor geological conditions encountered at modified sites for Main Access Tunnel (MAT) and Ventilation Tunnel (Adit to the Power House top).
- Cash Crunch with the civil contractor M/s HCC and old machine & equipments deployed at project.

# (iii) **Dhukwan SHEP (24 MW)**

Civil works of Dhukwan SHEP, which was planned to be awarded in July, 14 could not be awarded due to delay in clearance of forest land by GoUP. It could be awarded on 30<sup>th</sup> Oct, 14 and delay in cutting of tress by Forest Department. Due to this delay the activities and corresponding funds flow has to be shifted to F. Y. 2015-16.

# (iv) Others (New Projects)

Hon'ble Supreme Court has passed order on 13<sup>th</sup> August, 2013 directing MoEF and State of Uttarakhand not to grant any Environmental clearance or Forest clearance for any new hydro electric project in the State of Uttarakhand until further orders. Five Projects to THDCIL namely Jhelam Tamak HEP (108 MW), Malari Jhelam HEP (114 MW), Karmoli (140 NW), Jadganga (50 MW) and Gohana Tal HEP (50 MW) are affected due to this. Karmoli and Jadganga HEPs fall in Eco Sensitive Zone which may have to be abandoned.

# (C) NHPC

The reasons, project wise, for shortfall are given below.

- (i) Subansiri Lower: Construction works of Subansiri Lower (2000 MW) HEP of NHPC, located on the border of Arunachal Pradesh and Assam are stand still since 16.12.2011 due to local agitation by various protesting groups and stay on resumption of work by NGT, Kolkata vide order dated 11.12.2015. At present, preparatory works as required for the resumption of construction activities are going on. Downstream protection & developmental works and CSR works are also in progress. Further, in line with NGT order dated 11.12.2015, the project is also carrying out emergent protection works as required for safety of partially constructed dam blocks as well as the Power House and Water Conductor structures including execution of COW (Cut Off Wall) work.
- (ii) **Parbati-II:** Broad reasons which have contributed in extension of completion date of the projects are as given below:
  - Initial delay in start of Dam works due to delay in Revised Forest clearance.
    - Back hill slope failure of Power House three times.
    - Burial of TBM due to heavy ingress of water with silt from TBM
    - Ban on use of aggregates by Hon'ble High Court, Shimla.
    - Flash flood in Jigrai Nallah four times.
  - Encountering of Poor Geological conditions during excavation of HRT by TBM.
- (iii) <u>Kishanganga</u>: Work has been delayed due to restriction imposed by the International Court of Arbitration for works in river bed, agitation by project effected people and adverse law & order problem in the Kashmir valley since 09.07.2016.
- (iv) <u>Uri-II, Nimmo Bazgo, Chutak</u>: Planned expenditure in these projects could not be utilized due to delay in tendering and ongoing bandh/strikes in valley.
- (v) <u>Projects under clearances and S&I stage</u>: Less utilization on account of delay in clearances from MoEF for Teesta-IV, Twang-I&II, Dibang projects and Implementation stay from Hon'ble Supreme Court for Kotli Bhel-IA project.
- (vi) Delay in award of major works in Pakal Dul HE Project (1000 MW) by CVPPL.

# SJVNL

face.

The reasons project wise, for shortfall are given below.

- (i) **Kholongchhu HEP**: Formation of Joint Venture (JV) was under process.
- (ii) Wangchhu HEP: Detailed Project Report (DPR) approval and finalization of Share Holders Agreement (SHA) was awaited. Project could not take off due to nonfinalization of Share Holders Agreement (SHA) by Druk Green Power Corporation (DGPC).
- (iii) Rampur HEP: One of the main reasons for under utilization of budget in respect of Electro-Mechanical Works of Rampur Hydro Power Station was because of nonsubmission of invoices by Bharat Heavy Electricals Limited (BHEL) for the supply and works already completed.
- (iv) Uttarakhand Projects: Environment and Forest Clearance for Devsari HEP and Naitwar Mori HEP were awaited from MoEF&CC, GoI for want of Hon'ble Supreme Court verdict. Embargo was lifted in November, 2015. For Jakhol Sankri HEP, National Board of Wild Life (NBWL) Clearance was awaited.
- (v) **Dhaulasidh HEP**: PIB Clearance was awaited. SJVN was asked to find ways and means to reduce the tariff in view of high cost of the project.
- (vi) Luhri HEP: Project re-planned as staged development. Stage-III (Sunni Dam) was allocated to Himachal Pradesh Power Corporation Limited (HPPCL) by Government of Himachal Pradesh (GoHP) on 10.06.16. Stage-II was within submergence of proposed Sunni Dam of HPPCL, so investigations of Stage-II & Stage-III could not be taken up. However, Sunni Dam HEP has now been reallocated to SJVN vide GoHP letter dated 23.01.17 and process for survey and investigation has now been initiated.
- (vii) Devsari HEP: Environment Clearance/Forest Clearance is awaited, delaying the project to progress into construction phase. Forest Advisory Committee (FAC) recommended the diversion of forest land subject to fulfillment of certain conditions.
- (viii) Jakhol Sankri HEP : No objection from National Board of Wild Life (NBWL) was accorded on 23.08.16. Techno Economic Clearance (TEC), Environment Clearance and Forest Clearance are awaited.
- (ix) **Arun-3 HEP**: Delay in acquisition of private land and diversion of forest land by **Government** of Nepal resulting delay in access for the Project. Cabinet Committee on Economic Affairs (CCEA) approval accorded on 22.02.17.
- (x) Buxar Thermal Power Project: Infrastructure work delayed due to pending Environment Clearance. Environment Clearance accorded on 28.02.17. Coal block de-allocated and as a result alternative coal block will be required for which fresh application has been made to Ministry of Coal and matter is being examined by Ministry of Coal, Government of India.

The variations in actual expenditure are attributed to the delay in scheme finalization (DPR Clearance), statutory clearances etc. Currently Investment Decisions for Main works in respect of Buxar Thermal Power Project, Naitwar Mori

HEP, Dhaulasidh HEP and Devsari HEP while for Pre-construction activities of Luhri Stage-I & II, Sunni Dam HEP and Jakhol Sankri HEP are in pipeline.

(II) The following measures have been taken for effective monitoring and improving the performance.

## **Ministry Level**

- (i) A Power Project Monitoring Panel (PPMP) has been set up by the Ministry of Power for monitoring of on-going projects.
- (ii) Regular reviews are also undertaken by Ministry of Power, Ministry of Heavy Industries and Cabinet Secretariat to identify the constraint areas and facilitate faster resolution of inter-ministerial and other outstanding issues.
- (iii) Central Electricity Authority (CEA) monitors the progress of under construction power projects through frequent site visits and interaction with the developers and equipment suppliers. CEA holds review meetings periodically with the developers and other stakeholders and identify issues critical for commissioning of projects and help in resolving them.
- (iv) In case of Central Power Sector Undertakings (CPSUs) Projects, the project Implementation parameters/milestones are incorporated in the annual MoU signed between respective CPSUs and MoP and the same are monitored during the quarterly performance review meeting of CPSU's and other meetings held in MoP/CEA.
- (v) Matters are being taken up with State Government/District Administration and they are extending help to the project implementing agencies in resolving ROW issues.
- (vi) Issues are also raised in PRAGATI, for proactive governance and timely implementation, as and when required
- (vii) The progress of the projects is regularly uploaded on the Government websites for online monitoring.
- (viii) Form year 2015-16, target of CAPEX has been made mandatory in the MoU to be signed between Ministry of Power and CPSUs.

# **Organisation Level:**

- (i) Apart from the periodical site visits, Project Review Team (PRT) meetings and Project Review Meeting (PRM) are held by the Project Monitoring department.
- (ii) Project Review Meetings are periodically held with the Contractor to evaluate performance and resolve the issues to expedite progress.
- (iii) In addition to above, an external Project Review Panel (PRP) / Technical Advisory Committee is also invited as and when required to review the project progress and advise on technical matters.

(III) It may be observed from the above that majority of the factors /reasons are external which are beyond the control of CPSUs and therefore it may be not be possible to place the responsibility for delay(s) on any particular officer /official of the CPSUs Review of the monitoring mechanisms is a continuous process at both at the Ministry and organization level and efforts are to ensue for

better monitoring and control so that the timelines set for execution of the projects are adhered to.

[Ministry of Power F. No.10/2/2017, Budget Date7/6/2017]

## (Recommendation Sl. No. 4, Para No.2.4)

The Committee note that a target of 88,537 MW has been fixed for capacity addition during the 12<sup>th</sup> Plan Period. The Committee are glad to note that against this target, a generation capacity to the tune of 93,535.47 MW, have already been installed in the country. Due to this massive capacity addition and overachieving of targets, the country has moved from power deficiency to power sufficiency. However, the fact that disturbs the Committee are the poor performance of CPSUs and non-achievement of targets by them. For the entire Plan, they had been assigned the target 26,182 MW, however, they could add only 17,047.62 MW capacity during the period. Their poor performance becomes more conspicuous when we juxtapose it with that of States and Private Sector which have done exceptionally well. Both the sectors have exceeded their targets by big margins. The Committee believe that for the proper development of power sector, the contribution of all the three sectors i.e. Central, State and Private Sectors should be as assigned and they should compete with one another in outdoing. The role of Central Sector in providing electricity at lower tariff is still indispensable. In view of this the justification that it does not matter as long as overall capacity addition targets are achieved, is not convincing. The Committee feel that the present crisis of higher tariff and low PLF of thermal plants could be attributed to imbalance in the share of capacity addition among the three sectors. The Committee, therefore, strongly recommend that the performances of CPSUs be improved by making all the possible efforts. It is not the first time that the Central Sector has performed poorly. Their performance even during the 11<sup>th</sup> Plan has equally been poor, which led to slippage of projects of 21,654 MW capacity into 12<sup>th</sup> Plan. Therefore, the Central Sector, during the 12<sup>th</sup> Plan period, could not complete even their projects that slipped from 11<sup>th</sup> to 12<sup>th</sup> Plan. Despite the advantage of technical expertise, resources and manpower recurrence of nonperformance by CPSUs during the last two plan periods is a cause of serious concern and Government should seriously introspect about it for effective remedial measures.

## **Reply of the Government**

The generation capacity addition target set for the 12<sup>th</sup> Plan was 88,537 MW from conventional sources of energy. Against the target, a capacity addition of 99,209

	THERMAL		HYDRO		NUCLEAR		TOTAL	
SECTOR	TARGET	ACH.	TARGET	ACH.	TARGET	ACH.	TARGET	ACH.
CENTRAL	14878	15868.6	6004	2584.02	5300	2000	26182	20452.62
STATE	13922	22201.35	1608	2276	0	0	15530	24477.35
PRIVATE	43540	53660.5	3285	619	0	0	46825	54279.5
ALL INDIA	72340	91730.45	10897	5479.02	5300	2000	88537	99209.47

MW has been achieved. The sector wise and fuel wise generation capacity addition achievement vis-à-vis target is given below:

It is true that overall achievement of the Central Sector during the 12<sup>th</sup> Plan period was 78% of the target. As can be seen from above that, against the target of 26,182 MW, a capacity addition of 20453 MW (78%) has been achieved by the Central Sector comprising of 15,867 MW thermal , 2584 MW hydro and 2000 MW nuclear.

However, the capacity addition achieved by the Central Sector in thermal has been 15,867 MW against the target of 14878 MW, which is 107% of the target. The gap between the overall target and achievement in case of central sector can be attributed to the slippage in capacity addition on account of hydro and nuclear. In case of nuclear, against the capacity addition target of 5300 MW, only 2000 MW has been achieved which is only 37.7% of the target.

In case of hydro, there has been an overall slippage of capacity addition. Against the capacity addition target of 10897 MW in the 12<sup>th</sup> Plan, only 5479 MW has been achieved. This is approximately 50.3% of the target. Capacity addition achieved from Central Sector is 2584.02 MW against the target of 6004 MW. This is around 43% of the target. Private Sector could achieve 18.8% of the target.

The Hydro Sector is plagued by a number of factors which have affected its development and is reflected in the shortfall in capacity achievement. The various reasons for slipping of the projects are geological uncertainties, delay in land acquisition, R&R issues, forest and environment issues, contractual issues, inter-state issues, funds constraints, local issues, poor infrastructure, natural calamities, inter-state issues, court cases etc.

Further, to improve the capacity addition performance of the power sector public undertakings, and to ensure that the projects are commissioned on time, the Government has taken the following steps:

- (i) The project implementation parameters / milestones are incorporated in the annual MoU signed between respective CPSU's and MoP and the same are monitored during the quarterly performance review meetings of CPSU's and other meetings held in MoP/ CEA.
- (ii) The issues related to erection and supply of Electro-Mechanical equipment is expedited with BHEL in various meetings held in CEA / MoP and other local issues affecting the progress of works are taken up with respective State Governments by the Concerned CPSU / MoP.
- (iii) Further, the following monitoring mechanism is in place in Ministry of Power to coordinate country's hydro capacity addition programme and to ensure that it proceeds smoothly:
  - a) Central Electricity Authority (CEA) is monitoring the under construction hydro power projects (above 25 MW) in pursuance of Section 73 (f) of Electricity Act, 2003. The progress of each project is monitored continuously through site visits, interaction with the developers & other stake holders. Chairperson, CEA holds review meetings with the Power Projects Monitoring Panel (PPMP) and monitoring divisions of CEA.
  - b) Power Project Monitoring Panel (PPMP), set up by the Ministry of Power, independently follow up and monitors the progress of the hydro projects.
  - c) Ministry of Power also reviews the progress of ongoing hydroelectric projects regularly with the concerned officers of CEA, equipment manufacturers, State Utilities / CPSUs / Project developers, etc.

[Ministry of Power F. No.10/2/2017 – Budget, Date7/6/2017]

## (Recommendation Sl. No. 5, Para No.2.5)

## Deen Dayal Upadhaya Gram Jyoti Yojana (DDUGJY)

The Committee note that the Government has approved DDUGJY with a total investment of rupees 43,033 crores in the country for feeder separation and strengthening of sub-transmission and distribution network. Rural electrification is the core activity under the scheme. Projects worth rupees 15,596 crores have been approved by the Government of India for feeder separation. As on 1<sup>st</sup> April, 2015, there were 18,452 un-electrified villages in the country. Till 31<sup>st</sup> January, 2017, 11,941 villages have been electrified and the electrification of the remaining villages is targeted by May, 2018. The Committee have been apprised that projects for rural electrification have been sanctioned irrespective of the population criteria. The Committee feel that the figures regarding electrification of villages need to be rechecked as far as the number of un-electrified villages are concerned. It is not a

question of census villages only. As per the guidelines of the DDUGJY, all the habitations irrespective of number of population are to be electrified under the scheme. Hence, the criteria of census villages does not go well. The Committee are apprised that figures regarding electrification of un-electrified villages are given by the State Government and in federal structure, we have to act accordingly. The Committee are aware of the Constitutional and administrative limitations. However, these limitations cannot be roadblock for depriving the people from their legitimate rights. Some mechanism will have to be evolved in consultation with the States or through suomoto action to ascertain accurate number of electrified villages. Taking the basic criteria into account of the scheme, a joint mechanism can also be thought of leaving no scope for any ambiguity with regard to number of un-electrified villages. If the status quo remains regarding electrification under the scheme, then in all likelihoods, it will become a tailspin. The Committee, therefore, strongly recommend that a fresh thinking should be given by all concerned with regard to the number of un-electrified villages in the country so that the measures under the scheme could be taken us to electrify them.

## **Reply of the Government**

In order to electrify all the un-electrified villages in the country, States were requested to provide the list of un-electrified villages as on 01.04.2015 duly identified by their census code. Accordingly, States submitted list of 18,452 un-electrified census villages in the country and all the un-electrified has been sanctioned under DDUGJY. Thereafter, during execution States have informed some additional un-electrified villages for which in principal approval has already been given to electrify these villages with in sanctioned cost. Notwithstanding, States have once again been requested to include all the un-electrified census villages under ongoing DDUGJY scheme within the total sanctioned cost.

As regard to electrification of habitations is concerned, based on the information available with REC, it is estimated that there are total 16.07 Lakh habitations in the country, of these 5.38 Lakh habitations are 100% electrified and 5.84 lakh habitations are having DT capacity for 100% household electrification. The States have been requested to give priority to provide 100% electricity access in all the habitations under DDUGJY projects.

[Ministry of Power F. No.10/2/2017, Budget, Date7/6/2017]

## (Recommendation Sl. No. 6, Para No.2.6)

The Committee note that as per the census of India, the lowest primary administrative unit is a village. However, the villages are of different sizes in terms of population depending upon the geography of area, availability of land and water, etc. Under the scheme, a village is declared as electrified if (i) basic infrastructure such as Distribution Transformer and Distribution Lines are provided in the inhabited locality as well as the Dalit Basti/ hamlet where it exists (For electrification through Non-Conventional Energy Sources a Distribution Transformer may not be necessary) (ii) electricity is provided to public places like school Panchayat Office, Health Centres, Dispensaries, Community Centres, etc., and (iii) the number of household electrified should be at least 10% of the total number of households in the village. Under DDUGJY, all Census villages are eligible to be covered for electrification. Although present definition envisages electrification of at least 10% households, DDUGJY scheme provides for creating access to electricity for all households. The Committee feel that the definition of the electrified village need a revisit as only 10 per cent electrification of a village makes it eligible to be declared as electrified village. Most of the small villages in the country do not have public places like schools, Panchayat Office, Health Centres, Dispensaries, Community Centre, etc and hence are out of the ambit of the definition of electrified village. This kind of approach does not serve the purpose as the scheme aims at electrification of smallest of the village. The need for intensive electrification of partial electrified villages arises due to such discrepancies only. The repeat exercise of identical nature in the same village is nothing but wastage of time and resources. Electrification of a village should be electrification of the entire village and be not categorized as partial or intensive electrification. This kind of approach belies the basic objective of the scheme as out of 7,60,967 partial electrified villages, 4,14,487 villages have been intensively electrified during the last 3 years and thus leaving huge number of villages for intensive electrification. The Committee feel that this kind of approach should be avoided as far as definition of electrified villages are concerned. The Committee, therefore, strongly recommend that the definition of electrified village should be amended and a village should be treated as electrified only after the 100 percent electrification of the entire village is done. Also, The Government should contemplate to provide three phase line in the villages which are nearing completion or yet to be electrified under the scheme.

## **Reply of the Government**

Keeping in view, the objective of scheme to provide access to electricity to all rural households, it is envisaged to create rural electricity infrastructure in un-electrified villages as well as in already electrified villages. Creation of rural electricity infrastructure in already electrified villages for providing access to electricity to remaining un-electrified households and providing free electricity connections to BPL households has been termed as 'Intensive Electrification of Villages' under this scheme. Under Intensive Electrification (IE) mainly lines are erected and capacity of distribution transformer is enhanced.

Notwithstanding the current definition of electrification of villages, the emphasis of the Government of India is to provide 100% household electricity connection in the country. State Power Utilities are being pursued to provide 100% household's connectivity in unelectrified villages as well as electrified villages on priority.

[Ministry of Power F. No.10/2/2017, Budget, Date7/6/2017]

## Integrated Power Development Scheme (IPDS)

The Committee note that power sector has been reeling under huge financial losses and it has placed massive burden on Union and the State Governments. Power distribution is a vital link in chain of power generation and supply. The financial health of the entire power sector depends on the financial viability of power distribution sector. With a view to affect turnaround in the sector, Government launched various schemes since 2000 and 2001 onwards. Restructured Accelerated Power Development and Reform Programme (R-APDRP) was launched in the year 2008 with a view to establish IT system for baseline data acquisition and for actual, demonstrable performance in terms of AT&C losses reduction below 15 per cent on sustainable basis. This was implemented in towns with population of more than 30,000. IPDS scheme was launched by the Government in the year 2014 to extend financial assistance against the capital expenditure to address the gap in subtransmission and distribution network and metering in urban areas to supplement the resources of Discoms. The component of IPDS inter alia include (i) strengthening of sub-transmission and distribution network in the urban areas; (ii) metering of distribution transformers/feeders/consumers in the urban areas and (iii) IT enablement of distribution sector and strengthening of distribution network under R-APDRP for 12<sup>th</sup> and 13<sup>th</sup> Plans by carrying forward the approved outlay of R-APDRP to IPDS. All Discoms including private and State Power Departments will be eligible for financial assistance under the scheme. The Committee have been apprised that achievements under IPDS are on expected line and in line with the annual targets. The Committee also note that funding under IPDS shall also be for completion of optical fiber missing links to connect all the 33 KV or 66 KV grid sub stations under the establishment of National Optical Fibre Network, establishment of National Power Data hub at CEA and installation of solar panels. In the opinion of the Committee, the scheme of IPDS should have resulted in tangible AT&C loss reduction but it is yet to become a reality. As of now, the various structures of IPDS may be in course of stabilization but the areas where the network under IPDS is in place and where the experiment process is over (particularly in Go-Live towns), result should be started flowing in on a sustainable basis. The Committee believe that the data of the IPDS may be available in Go-Live Towns and in the process of collection and analysis. The Committee, therefore, recommend that the scheme of IPDS as amended hitherto should be evaluated with regard to its performance and corrective measures may be taken if the desired results are yet to come.

### **Reply of the Government**

Integrated Power Development Scheme (IPDS), launched in December 2014 is designed to produce results of AT&C loss reduction by 2019-20. As per scheme guidelines, 60% of Scheme Cost (85% for Special Category States) is provided as grant and additional 15% of Scheme Cost (5% for special category states) can be provided as grant only on achieving other milestones including reduction of AT&C losses at Utility level as per agreed AT&C loss reduction trajectory by 2019-20. Till date, award has already been placed in 223 out of 538 circles for which the scheme has been sanctioned. It is envisaged that State Utilities/Power Departments will place award for most of the remaining circles by FY 2017-18 and implement the project within next two years. As such, the impact of the scheme may partially be visible from 2018-19 onwards. As suggested by the Committee, a Third Party Concurrent Evaluation of the scheme would be carried out for the Scheme. The Nodal agency is in process of appointing an agency for the same.

It is submitted that a third party evaluation was conducted under Restructured Accelerated Power Development & Reforms Programme (R-APDRP) notified in September'2008 and presently subsumed under IPDS. Further, Go-Live (i.e. IT enablement) has been reported in 1346 out of 1405 towns with declaration of 100% towns as Go-Live reported in 23 out of 30 States. Utilities upload Post Go-Live reports on IPDS web portal every month. Various Post Go-live parameters like AT&C loss reduction, Consumer Grievance redressal, New Connection release, High loss feeders, power reliability indices (SAIFI/SAIDI) and Feeder meter communication etc. for Go-Live towns are being monitored on monthly basis and States are being ranked based on improvement on these parameters. These parameters are being shared in monthly RPM/ Regional review meetings and are available even in open platform through an URJA App developed by PFC/MoP. As per Post Go-Live reports received online for 1248 towns for February 2017, townwise AT&C losses have been reported to have reduced vis-à-vis baseline values in 1024 towns. As such, the results are on expected lines.

An Impact Assessment Study of R-APDRP Go-Live towns conducted through independent agencies appointed by MoP, GoI also revealed AT&C loss reduction in 65 out of 76 sample Go-Live towns, where the study was conducted. In view of above, it can be inferred that desired results are being achieved through R-APDRP, now subsumed under IPDS.

[Ministry of Power F. No.10/2/2017, Budget, Date7/6/2017]

The Committee note that under that IPDS scheme Projects worth Rs.25,880 crores have been sanctioned for 3,597 towns in 537 circles. Power Utilities have placed award for 189 circles and all circles are likely to be awarded by March, 2018 and the execution is likely to be completed within 24 months of the award. The Committee have also been apprised that there has been immense improvement in urban areas including metering progressively and AT&C losses are likely to reduce from financial year 2019-20. It has also been stated that reduction of AT&C losses in different utilities are likely to be different due to terrain, nature of loan and consumer mix. Utilities have signed tripartite agreement with Central and State Governments and 44 utilities have appointed Project Management Agencies. Standard bidding document for implementing the IPDS project has also been released. Under IPDS, the aim of reduction of Discom-wise AT&C losses is to be achieved by 2021-22 as per trajectory and the loss reduction trajectory has been finalised in consultation with all the State Governments. The Committee find the timeline for reduction in AT&C losses very flexible. The Committee are unable to comprehend about the flexibility in timeline for loss reduction. The IT equipped network established under IPDS enables us to identify the points of leakages and weaknesses. The towns which have got the network have started showing the reasons for losses. In such a situation, granting huge leverage in terms of time for loss reduction appears to be unreasonable. The Committee, therefore, recommend that all the States should be convinced to take follow up measures urgently to plug the loopholes responsible for AT&C losses as identified by the IPDS scheme and bring it to the desired level as early as possible.

## **Reply of the Government**

Ministry of Power, Government of India and Power Finance Corporation, the designated Nodal Agency for operationalization of Integrated Power Development Scheme(IPDS), regularly impress upon State Utilities/Power Departments to take follow up measures to plug loopholes as identified through IT enabled system established in various towns under Restructured Accelerated Power Development & Reforms Programme (R-APDRP), presently subsumed under IPDS. As on 31<sup>st</sup> March'17, IT enabled system has been reported to be established in 1346 towns out of a total of 1405 towns, where the same was sanctioned under R-APDRP.

Various Post Go-live parameters like AT&C loss reduction, Consumer Grievance redressal, New Connection release, High loss feeders, power reliability indices (SAIFI/SAIDI) and Feeder meter communication etc. are being monitored on monthly basis on IPDS portal and URJA App for Go-Live towns and States are being ranked based on improvement on these parameters. The performance of State Utilities based on said parameters is discussed in monthly Review Planning and Monitoring meetings (Chaired by Union Secretary (Power) that are attended by State Energy Secretaries and/or heads of various Discoms etc. apart from representatives from MoP, GoI. As per Post Go-Live reports received online for 1248 towns for February 2017, AT&C losses have been reported to be reduced vis-à-vis baseline values in 1024 towns.

Ministry of Power, GoI has also started an 'Online Feeder Monitoring System (OFMS)' for online porting of feeder data from Go-Live towns of various State utilities on National Power Portal. Data from 24395 of about 32000 feeders in R-APDRP towns is being ported online on NPP. Monthly reports based on said data are being generated online and are being sent regularly to MDs of respective Discoms to enable them to initiate necessary administrative actions for reduction of AT&C losses. Data from cumulative of 31147 feeders is targeted for online porting by March'18.

MoP/PFC officials also regularly advise Utility officials in this regard. However, in line with the recommendations of the Committee, a revised trajectory for AT&C losses has been issued recently for the States keeping in view the commitments under UDAY and IPDS.

[Ministry of Power F. No.10/2/2017- Budget Date7/6/2017]

### (Recommendation Sl. No. 9, Para No.2.9)

The Committee note that an impact assessment study has been carried out to assess the benefit of IT implementation under IPDS. The study was conducted in 76 towns across 14 States where most of the towns have been declared Go-Live covering 10 per cent of the Go-Live towns and 15 per cent feeders in the selected towns. The finding has suggested AT&C loss reduction in 85% of these towns and the IT system identified the pockets for corrective measures. In addition, the reliability of power and improved consumer services are also the outcome of the newly placed system. The Committee find that as far as the reliability of power and improved consumer services are concerned, they are welcome steps, but reduction in AT&C losses it vital component of the scheme. If this is achieved early, other steps will automatically be taken care of. It is a fact that positive impact of the scheme is beneficial to consumers as well as to Discoms. The study also suggested that improvement in AT&C losses over Baseline value in the sample 76 towns yielded annual monetary benefits of rupees 185 crores. The proportionate annual monetary benefits extrapolated on the basis of energy consumed in all towns are estimated to be about 5,000 crores. This is very significant development as the study has been carried out only in 10 per cent of Go-live towns and 15 per cent of the feeders in

selected towns. If this is taken to be the trend and basis for computation, then the results will be phenomenal. The Committee have also been apprised that a study has been taken up on segregation of commercial losses from overall AT&C losses in 10 pilot towns. The Committee are aware that electricity is in concurrent domain and a lot needs to be done by the States in this sector. Nonetheless, it is also a fact that loss reduction trajectory has been decided in consultation with the State and towns which has been declared Go-live and where IT enabled system is being established spreading all across the country. Hence, no laxity can be permitted in the name of governance issue as far as IPDS is concerned. The system once established is capable of giving accurate data regarding leakages and losses and hence there is no scope whatsoever for any complacency in this regard. Segregation of commercial losses from overall AT&C losses will give a further fillip to our efforts in fixing the loopholes. The Committee, therefore, strongly recommend that there should be no letup in our efforts as far as implementation of the IPDS is concerned. Concerted and coordinated efforts from all the concerned should be the hallmark for fulfilment of the objectives under the scheme.

#### **Reply of the Government**

Ministry of Power, GoI and PFC are striving to make concerted and coordinated efforts with stakeholders for fulfilment of objectives under Integrated Power Development Scheme.

Major efforts in the direction are as follows:

- (i) Targeting Go-Live of balance 59 out of 1405 towns sanctioned under R-APDRP by March 2018
- (ii) Targeting completion of system strengthening works in additional 400 towns under R-APDRP Part-B by March 2018.
- (iii) Targeting data from over 31000 feeders on National Power Portal by March 2018
- (iv) Targeting sanctions of IT enablement under IPDS in all States by June 2017 for coverage of balance towns as per Census 2011 in the ambit of IT enabled energy audit.
- (v) Targeting award under IPDS for over 473 Circles by March 2018
- (vi) Monthly Review, Planning and Monitoring meetings with all stakeholders for discussing critical issues affecting implementation and enabling their resolution, sharing of best practices and discussions regarding Post Go-Live reports.
- (vii) Sending regular reports based on Feeder data from 11KV feeders on National Power Portal to Managing Directors of respective Discoms to enable them to

initiate administrative and technical interventions for reduction of AT&C losses

- (viii) Ranking of various States/Discoms/Towns on various parameters like AT&C losses, SAIDI, SAIFI, Pending Consumer Complaints, Pending Connections, E-Payment etc. based on Town wise Post Go-Live reports received online from various Utilities. This enables creation of positive competitiveness among various Discoms and facilitates improvement. Said rankings are also discussed in monthly RPMs and are available in public domain also on URJA App and web portal urjaindia.co.in, both developed by PFC under the aegis of MoP.
- (ix) Coordination for adoption 1912, the short code for electricity complaints, by all Utilities on pan-India basis and on toll-free basis to ensure consumer connect. As on date 1912 has already been implemented in 45/49 Government Discoms (41 with all service providers) and has been implemented as Toll free facility in 37 Discoms.

[Ministry of Power F. No.10/2/2017- Budget, Date7/6/2017]

## (Recommendation Sl No. 10, Para No.2.10)

## Ujjawal Discoms Assurance Yojana (UDAY)

The Committee note that UDAY has been launched with the objective to provide a sustainable financial and operational turnaround of Discoms making available permanent solutions to legacy debts and also to address potential future losses. It aims at empowering distribution companies with the opportunity to achieve breakeven in the next few years through certain initiatives. The initiatives inter alia include operational efficiency, importance to reduce average AT&C losses and elimination of gap between ACS and ARR by 2018-19. It also envisages increased supply of cheaper domestic coal, rationalizing coal linkages, liberal coal sweeping, coal price rationalization based on GCV, supply of washed and crushed coal, etc. The Committee feel that these are the welcome measures and will greatly enhance the efficiency of the power sector. The Committee are also aware that power is a Concurrent Subject and it is the States which have to shoulder the responsibility with sincerity to offset their regulatory assets. Union Government can only be the Friend, Philosopher and Guide in pursuit of their goal for liquidity of arrears accumulated over the years by the Discoms. The Government of India have devised a strategy after careful consideration of every aspect involved in the process. It is for the State Government to cooperate and seek guidance of the Union Government in case of any

difficulties in implementing such an emancipating scheme, i.e., UDAY. The Committee, therefore, recommend that every effort should be made to prompt the States to show the results by performing as per the structure of the scheme so that the electricity sector as a whole is brought out from the present dire state of affairs.

## **Reply of the Government**

An inter-ministerial Monitoring Committee, headed by Secretary (Power) takes review of the Scheme at regular intervals to assess the progress as well as to find the solutions of various difficulties faced by the States/UT during the implementation of the Scheme. So far, Seven Meetings of the Monitoring Committee have taken place.

A web-portal and a mobile App have also been developed and are operational now. Data on a wide range of performance parameters is captured in the system which provides useful insights to States as well as Central Government and also enables to initiate timely action and to avoid any slippages.

One to one discussions with States for evaluating DISCOM performance has also been initiated and the first such meeting with the four focused States of Rajasthan, Haryana, Punjab and Bihar was held on 06-02-2017.

[Ministry of Power F. No.10/2/2017- Budget, Date7/6/2017]

### (Recommendation Serial No. 11, Para No.2.11)

The Committee note that the financial turnaround of the distribution companies under UDAY has been envisaged after careful consideration of the nittygritty involved therein. Under the scheme, States will take over 75 per cent of the Discom debt as on 30 September, 2015 over two years of which 50 per cent will be taken over in the year 2015-16 and 25 percent in the year 2016-17 respectively. It will also entail the reduction of interest on the debt taken over by the States to around 8 - 9 per cent from 14 to 15 per cent. There are provisions for spreading the financial burden on States over 3 years to give flexibility in managing interest payments and incentives/ disincentives for future financial performance for the future losses of Discoms in a graded manner. Such States shall also be supported with additional coal at notified price and in case of availability through higher capacity utilization, low cost power from NTPC and other Central sector PSUs. In addition, the debt of Discoms not taken over by the States shall be converted by the banks, financial institutions into loans or bond with interest rate not more than banks base rates plus 0.1 per cent. Alternately, this debt may be fully or partly issued by the Discoms as State Guaranteed Discom Bonds at the prevailing market prices which shall be equal to or less than the bank base rate plus 0.1 per cent. While lauding the concept of the scheme, the Committee also appreciate the limited scope of maneuverability available for evolving an effective strategy. Within the given limitations, the ways suggested in the scheme for financial turnaround will be helpful, if implemented with the required urgency, true spirit and genuine intention. At some stage, the servicing of bonds will have to be done and it can only be done in a comfortable financial situation. Financial comforts can be achieved by the Discoms through rigorous discipline, sincere efforts, targeted timelines and strict implementation of the strategy. All the stakeholders will also have to display an exemplary resilience jointly and severally in fulfillment of the target. The Committee, therefore, strongly recommend and call upon all the stakeholders, i.e., State Government, Distribution Companies, Banks, Financial Institutions, Consumers, etc. to take up the issues as a mission so that the scheme become a success and distribution companies are out of woods.

## **Reply of the Government**

Every effort is being made to ensure that with the support of all the stakeholders, the objectives of UDAY Scheme are achieved within the stipulated timelines.

[Ministry of Power F. No.10/2/2017- Budget, Date7/6/2017]

## (Recommendations Serial No. 12, Para No.2.12)

The Committee note that so far 20 States and one Union Territory have signed the Memorandum of Understanding (MoU) with the Government of India under UDAY. In addition, discussions on UDAY are also underway with some other States who have shown interest to join the scheme. The Committee feel that the response of the States is encouraging as even they perceive it to be a genuine effort to rectify the problem plaguing the electricity sector. Despite the fact that there is no specific budgetary provision under the scheme, yet the response of the States shows that they are looking forward to this scheme to better their prospects in the energy sector. However, there are provisions under schemes like IPDS, DDUGJY, PSDF, etc. which may act as a catalyst to perform the obligations of the UDAY. Under the scheme, the provision of States borrowing against the 75 per cent outstanding debt would be outside FRBM limits is a great incentive. In addition, Discoms debts have been identified as the contingent liability of the States. In all, all the factors prima facie make the scheme a recipe for sustainable, financial and operational turnaround. Finding the scheme attractive, most of the States/Discoms have submitted their action plan and all the States have appointed Nodal Officers for better and smooth coordination of all the activities under the scheme. There is three-tier monetary mechanism in addition to the one being done on monthly basis at the Ministerial level. The Committee find the participation of States overwhelming which is a testimony of the scheme being acceptable to them for a smooth sailing to the desired conclusion. While commending the efforts, the Committee recommend that there should be some interactive mechanism which may suggest redressal of difficulties during the course of its implementation. This interactive mechanism may consist of stakeholders and corrective course of action, if required, may be taken based on their input while implementing the scheme. However, the timelines in this regard are of great essence and it should be ensured that they are adhered to religiously and it should not go on like DDUGJY in which case it will lose its sheen and relevance.

## **Reply of the Government**

The progress of all major Operational and Financial parameters are being monitored through Inter-Ministerial Monitoring committee headed by the Secretary (Power), GOI. Any deviation/slippages on the part of any Utility are also being brought to the notice of concerned State/DISCOM through quarterly detailed analysis reports and one-to-one focused meeting with them.

The implementation and progress monitoring framework of UDAY has been planned as under:

- (i) For overall monitoring of the Scheme, three tier monitoring committees at Discoms level, State level & Central level have been constituted with defined roles & responsibilities;
  - a) Level-1: DISCOM level Monitoring Committee Headed by CMD/MD of Discoms. It is envisaged that activities and the progress under the scheme shall closely be monitored by the head of Discoms in detail atleast once in a month and ensure resolving the Discoms specific and local issues, if any;
  - b) Level-2: State level Monitoring Committee Headed by CS/ ACS/ Principal Secretary-Energy/Power. Most of the states have already constituted the State level committees under the scheme. This committee is expected to conduct monthly

meeting to monitor the implementation of the scheme in the state as a whole and to resolve state specific issues, if any, including the state GENCOs & TRANSCOs;

- c) Level-3: Central level Monitoring Committee (Monitoring Committee) Consisting of inter-ministerial/organisational representative and headed by the Secretary(Power), GoI. The constituted committee has been meeting at reasonable intervals to discuss & resolve various issues comes up related to implementation of the scheme. So far 7 meetings of the Monitoring Committee have been held under the chairmanship of the Secretary (Power), Govt. of India.
- (ii) State/Discoms have to prepare the detailed Action Plan, showing the activity wise comprehensive roadmap for achieving the objectives. All the states except J&K and Uttarakhand have submitted the action plan.
- (iii) Similarly, every DISCOM/ State has to appoint a nodal officer under the scheme for better and smooth co-ordination of all the activities of the scheme. All the states have already appointed the nodal officers.
- (iv) In addition to the above monitoring mechanism, the scheme is also being periodically monitored in the monthly RPMs, by the Honb'le Minister of State (I/C) for Power/Coal /New and Renewable Energy and Mines as well as at the PMO level.

[Ministry of Power F. No.10/2/2017- Budget Date7/6/2017]

#### (Recommendation Serial No. 13, Para No.2.13)

The Committee are happy to note that States have already taken over the Discoms debt of around 1,84,000 crores under UDAY. This has led to some relief to Discoms by way of savings in interest and increase in cash flow. This can be attributed as a positive outcome of the scheme. Certain other important features of the scheme like Feeder Metering, Domestic Connections, UJALA, Rural Feeder (Audit), etc. are showing encouraging results. However, there are other parameters like Feeder Segregation, DT Metering (Urban), Feeder improvement, Feeder Metering (Rural) are areas which need greater concentration as they are very vital for the success of the scheme. There are also States whose outstanding dues as on 31<sup>st</sup> March, 2015 are extremely high. In this category, UP has the dues of more than 21,000 crores, Maharashtra 17,952 crores, Karnataka 11,518 crores, Telangana 7,470 crores, Tamil Nadu 7,462 crores, Haryana 6,197 crores, etc. The Committee, however, have not been apprised of the latest figure for the year 2016. The Committee feel that despite dues amounting to lakhs of crores of rupees, a beginning was required to address the issue and it has been made. If implemented with sincerity, UDAY will give desired results. The Committee, therefore, recommend that the pace of the scheme need to be maintained at all costs and State Governments

be alerted from time to time regarding their obligations under the scheme. Awareness campaign should also be launched about the objectives of this scheme among the masses to enable them to understand the scheme in the proper perspective and benefits which will flow from it in due course of time.

## **Reply of the Government**

Twenty Six States (Andhra Pradesh, Assam, Arunachal Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh & Uttarakhand) and **one Union Territory** (Puducherry) have signed the Memorandum of Understanding (MoU) with the Government of India under UDAY.

As on date, Bonds to the tune of Rs.2,08,641 crore have been issued by 15 States. Apart from this, Discoms have also issued Bonds worth Rs. 23,859 crore as on date under the scheme.

Awareness to masses is being carried out through a dedicated Web Portal and App. REC is sending out regular tweets on social media on the progress of UDAY. Further, the Ministry is also undertaking efforts to publicize the benefits of UDAY and dispel myths pertaining to UDAY through periodic media and analyst meets.

[Ministry of Power F. No.10/2/2017–Budget Date7/6/2017]

## (Recommendation No. 16, Para No. Para No.2.16)

The Committee note that as per reassessment studies of hydro-electric potential carried out by the Central Electricity Authority during 1978-87, the country have the hydro power potential to the tune of 1,48,701 MW. Against this, at present, hydro power installed capacity is 44,189 MW. The ministry have informed that hydro power projects of 12,217 MW area under construction whereas, projects having capacity of 26,160 MW have been concurred by Central Electricity Authority (CEA). The committee also note that the development of hydro power projects have been very slow in the country and a total capacity addition of just about 5181 MW has only been achieved during the 12<sup>th</sup> Plan so far. The Ministry have admitted that over the years, the hydro projects are becoming increasingly costlier mainly due to increased costs associated with environment and Resettlement & Rehabilitation (R&R). The Committee are aware of the numerous benefits of hydro power and have been advocating for their speedy development so that their development cost could

be kept to the lowest possible. The prime deterrence in development of hydro power as stated by the Ministry is initial high tariff. Apart from this environmental issue, local protest and difficult terrains have also been enumerated as the reasons behind their slow growth. The Committee are dismayed by these excuses for not developing hydro power sector at desired pace. All these problems were also there in the development of solar sector – be its higher tariff, requirement of vast land, etc. However, when the Government is determined to develop the sector, most of the problems got resolved. The latest tariff of solar power has now come down to below Rs. 3 levels. Considering the benefit of hydro power for the entire power sector, the committee are astonished as why the sector has not been given the due attention so far. Apart from being a clean and green source of energy, it can be used as a balancing power for intermittent renewable power and peaking power. The committee strongly believe that merely focusing on solar energy without hydro power will create disturbances in power sector by adversely affecting optimum utilization of thermal power stations. The committee, therefore, strongly recommend that every efforts should be made to develop hydro power sector expeditiously. Instead of isolated efforts there is an urgent need for a comprehensive plan for alleviating the concerns of this sector by providing long term finances at lower rate, grant of clearances in a time bound manner, development of enabling infrastructure, improving law and order situation and sensitization of local people about the benefits of projects development.

### **Reply of the Government**

The recommendation for expeditious development of hydro sector has been noted for compliance. In order to provide impetus to development of hydro sector, a revival scheme/programme formulated by the Ministry of Power has been circulated to the appraisal agencies. Salient features of the proposed scheme are:

- (i) Declaring all hydropower (irrespective of size) as Renewable Energy.
- (ii) Provide Hydropower Purchase Obligation (HPO) within currently mandated Non-Solar RPOs to qualify for dispatch priority to such > 25 MW HEPs which attain COD within 05 years after notification of the scheme.
- (iii) Providing 4% interest subvention during construction (maximum of 7 years) and 3 years post COD to all hydropower projects (both public and private sector) above 25 MW, attaining COD within 5 years after notification of this policy with funding from Coal Cess/ NCEF/ DONER (NLCPR) or any other source of fund.. This tentatively involves a Financial Implication of Rs. 16,709 Crs for an illustrative list of 40 projects of 11,639 MW.

- (iv) Excluding cost of enabling infrastructure from project cost for tariff calculations and reimbursement of the same from appropriate funds of the concerned department/entities of the GoI/State Govts.
- (v) Create a Hydro Power Development Fund (HPDF) from the Coal Cess/ NCEF/ DoNER (NLCPR) or any other source to meet the cost of rolling out hydro policy.
- (vi) Mandate to engage with bankers/ financial institutions for modifying lending terms and conditions for hydropower projects including Long term lending at affordable interest rate by banks and Fis including PFC/REC.

To expedite appraisal of DPRs of hydro power projects, the process of according concurrence has been reviewed and revised Guidelines have been issued. Further, Online system for submission and examination of DPRs has been made operational.

[Ministry of Power F. No.10/2/2017- Budget Date7/6/2017]

## (Recommendation Sl. No.17, Para No. 2.17)

The committee note that the per capita power consumption of our country at present is 1,133 kWh which is much lower than the world average of 3,026 kWh and incomparable when it comes to developed countries which have per capita power consumption as high as 12,947 kWh. Per capita power consumption is an indicator of overall social-economic development of a country. The reason for low per capita power consumption in our country could be attributed to absence of electricity access to millions of households in the country and suppressed demand due to high tariff. The committee, however, has been apprised by the Ministry that it is expected that the per capita power consumption will increase to 1,669 kWh by the year 2021-22. The Committee, considering the tremendous growth made in generation capacity, feel that now we can conveniently move in the direction of increased electricity consumption in the country. The committee, therefore, recommend that the Government should make all the efforts that can boost the demand of power by providing electricity access to all households, bringing down tariff of electricity, etc.

## **Reply of the Government**

The joint initiative for providing 24x7 Power For All (PFA) documents for various States and Uts started during 2014 and completed by end of 2016 (Except for Uttar Pradesh which was signed in 2017). This initiative aims at ensuring uninterrupted supply of quality power to existing consumers and providing access to electricity to

all unconnected consumers by 2019 in a phased manner. The Roll out plan identified in these action plan documents are at various stage of implementation by state and Uts.

Under RE component of DDUGJY scheme, provision for electricity connection to BPL households at the rate of Rs. 3000/- per connection in villages and habitation with population of 100 is available. However, the responsibility to provide electricity connection to APL above poverty level households by following the norms and procedure given in the standard of performance (SOP) lies with respective Discom/ State power utility.

Further, a Committee formed by MoP under Chairmanship of Chairperson, CEA on "Power Demand- States/Uts to initiate innovating schemes to enhance electricity consumption" has recommended various measures (long term/medium term /short term) to increase the consumption level across various categories including electrification of households. The report is under examination.

Various measures taken by the Government for reduction of tariff are as under:

- (i) UDAY scheme has been launched by Central Government for improving operational and financial efficiency of Discoms. So far 27 States/Uts have joined the Scheme. This scheme would bring down the cost of supply.
- (ii) All the future procurement of power is being done through competitive bidding.
- (iii) Operational efficiency in generation, transmission and distribution are enhanced progressively in cost plus tariff regime through performance based regulation mandated in the Tariff Policy.
- (iv) Rationalisation of coal linkage to thermal generating stations to reduce the cost of transportation of coal.
- (v) Flexibility in the usage of domestic coal at relatively more efficient thermal generating stations.
- (vi) Specific provisions have been made in the Tariff Policy, 2016 regarding lower tariff for poorer section of the society.

[Ministry of Power F. No.10/2/2017- Budget Date7/6/2017]

## (Recommendation Sl. No. 19, Para No.2.19)

The Committee note that technological advancements are ushering in into the electricity sector to achieve higher output. The introduction of super critical technology into thermal is being considered on large scale. This is a welcome step and it is expected that it will revolutionize the power sector of our country. However the committee, in this regard, would like to be circumspect. Our ground realities should be taken into account before introducing this move. The availability of indigenous coal and its quality, its heat and ash content, gross calorific value and washing infrastructure should be the guidelines for introduction of super critical technology. If this is not taken into account, the price or the tariff of the electricity may be beyond the reach of the common consumers. The power sector in our country has not grown in a balanced manner and variance in pricing of electricity has led to distortion in development of the power market. Instead of demand supply gap or mismatch, it has resulted into supply-demand imbalance. Despite shortage of power in the country, demand is not being raised for electricity due to its unreasonable and unpalatable prices. Hence, the super critical technology should focus more on reasonable and competitive tariff so as to make it viable rather than introducing it with indiscretion and without evaluating the consequences. If this technology remains alien to our conditions, this will become NPA of the power sector involving huge public money and resources. The core issue for technology should be its competitive pricing in the Indian context so as to right size the electricity sector from tariff view point as well as balanced growth. The committee, therefore, strongly recommend that there should be advent of latest technology in the electricity sector but such technology be akin to Indian conditions with regard to availability of resources/fuel and also for competitive power tariff.

## **Reply of the Government**

The Indian coal quality, ambient and operating conditions and design practices have been considered in adoption of supercritical technology. The expert Committee constituted by CEA viz. – "Committee to Recommend Next Higher Unit Size For Coal Fired Thermal Power Stations", considered these aspects in recommending supercritical steam parameters and unit sizes. CEA has also brought out a document on "Standard Technical features of supercritical units" which brings out salient design and sizing practices to be adopted with Indian coal and other operating conditions, for the guidance of developers.

Efforts have also been made for creation of indigenous manufacturing facilities for supercritical units with a view to ensure long term service support and problem solving. As a result, BHEL and several other International manufacturers through Joint Ventures with Indian companies have set up manufacturing facilities for manufacturing of supercritical power equipment – boilers and turbine generators.

Presence of several indigenous manufacturers through Indigenous manufacturing, progressive import reduction and competitive pricing would also lead to cost reduction of supercritical units.

[Ministry of Power F. No.10/2/2017- Budget Date7/6/2017]

#### **Coal for Power Plants**

#### (Recommendation Sl. No. 20, Para No.2.20)

The Committee note that the Ministry have reported a loss of 484 MU generation loss during the year 2016-17 (till Dec. 2016) due to shortage of coal. They have also stated that 15.3 MT have been imported during the year 2016-17 (till Dec. 2016) for blending with the domestic coal. The Ministry have further stated that with the concerted efforts of Ministry of Power/Ministry of Coal, domestic coal availability in the power plants has been improved. As a result, the import of coal by power plants required for blending with domestic coal has declined since 2014-15. In regard to improving the quality of indigenous coal they have stated that in order to address quality issues of the coal supplied to power plants, it has been decided by the Ministry of Power on 28th October, 2015 that coal samples shall be collected and prepared by a Single Third Party Agency appointed by power utilities and coal companies. It has also been decided on 16 May, 2016 by the Ministry of Power that the Third Party Sampling at unloading - end may also be carried out by Central Institute of Mining and Fuel Research (CIMFR). To comply with the guidelines issued by the Ministry of Environment & Forests dated 2 January, 2014 regarding transportation of coal to the power plants located beyond 500 kms, coals is washed to reduce the ash content below 34%. The Committee are surprised by generation loss due to shortage of coal. The committee believe that the era of coal shortages are thing of past and with the new development in coal sector the coal is available in abundance. The committee, therefore, recommend that it should be ensured that adequate coal is available to power plants so that no generation loss is there due to shortage of coal. Moreover, to improve the quality of indigenous coal to lessen the dependency on imported coal, the measures as decided by the Ministry of Power should be strictly adhered to.

### **Reply of the Government**

Coal is supplied to the power plants based on their estimated requirements. There was substantial loss of generation due to shortage of coal in the past. However, during 2015-16 the loss became NIL. Also, during 2016-17 (Apr,16-Feb,17), the power utilities have reported generation loss of 0.4 Billion Unit (BU) only, due to shortage of coal against total coal based generation of 827 BU during the same

period. The loss is mainly due to production problems at few coal mines during rainy season.

Regular monitoring of coal stock at power stations is being carried out by CEA on daily basis to avoid any shortage of coal. In addition to this, coal supply to Power utilities is monitored regularly by an Inter-Ministerial Sub-Group of the Infrastructure Constraints Review Committee, comprising of representatives from Ministry of Power, Ministry of Coal, Ministry of Railways, CEA & CIL, constituted by the Infrastructure Review Committee of the Cabinet Secretariat. This Sub-Group takes various operational decisions for meeting any contingent situations relating to supply of coal to Power sector including critical coal stock position for power plants.

[Ministry of Power F. No.10/2/2017- Budget Date7/6/2017]

## (Recommendation Sl. No. 21, Para No.2.21)

The Committee note that 6 captive coal mines have been allocated to NTPC. In regard to delay in the development of these mines, the Committee have been apprised that there was no delay on part of NTPC. NTPC, as a coal block allottee, has taken all required actions, in time, for undertaking various block development activities. Statutory approvals from various agencies, site specific studies, and activities, which were in NTPC's control, progressed well in all coal mining projects. Statutory clearance / approvals e.g. Environment & Forest Clearances, Mining Plan approval, land acquisition notifications & verification / certification process, Approval of R&R plan, etc., which are beyond NTPC's control, took longer time. These captive coal mines are very important for NTPC as the production from same would ensure the reliable and sufficient coal supply to its power plants resulting in sustained growth of generation and capacity addition programme. Moreover, expeditious development of captive coal mines may also result in reduction in cost of power generation thus paying the way to offer tariff at lower rates. Issues involved in the entire process of coal block allocation to mining should be addressed in a time bound manner. If necessary, a Project Monitoring Group may be constituted consisting of all the concerned agencies and a periodic meeting may be held so as to address the various issues responsible of delay in mining the coal from allocated blocks. The Committee, therefore, recommend that ever efforts should be made to develop these captive coal mines. The Ministry may also coordinate with the concerned agencies, if the need arises.

## **Reply of the Government**

As regards NTPC, coal production has started from its first captive mine, e.g., Pakri-Barwadih. So far, more than 1 lakh MT coal has already been despatched. Further, the Contract for Mine Development cum operation has been awarded for Dulanga Coal mine, mining yet to be started. All this was possible with the help and support of PMO, Ministry of Power, Ministry of Coal, Government of Jharkhand etc.

In case of Pakri-Barwadih coal block (located in Hazaribagh District, Jharkhand), the start of mining operations, block development activities / work progress were hampered mainly because of the following :

- (i) Adverse law & order situation at project site.
- (ii) Slow disbursement of private land compensation under LA act and slow processing of proposals for land acquisition / Government land transfer by District Administration.
- (iii) Absence of policy of State Government regarding squatters on forest land and on Government land for less than 30 years
- (iv) Non-performance of the MDO contract, awarded earlier to M/s. Thiess Minecs for development and operation of this coal block. Ultimately, NTPC had to terminate the contract and has appointed a new MDO.

However, with the support of State Government and Hazaribagh District Administration, situation is presently under control and mining operations are under progress.

MDO appointment is expected shortly for Chatti-Bariatu and Talaipalli Coal Mines. Development activities are in progress for other mines. These Mines are proposed to be developed progressively based on availability of all statutory clearances, appointment of MDO and as per the stipulations. The coal production from Chatti-Bariatu, Kerandari, Dulanga & Talaipalli is expected to start by Nov. 2019.

[Ministry of Power F. No.10/2/2017-Budget Date7/6/2017]

# **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 Sl.No. 14, Para No.2.14

The Committee note that at present the country has total installed power capacity of 3,14,642.32 MW. They further note that as per draft 19<sup>th</sup> Electric Power Survey (EPS), the peak demand and energy demand during 2021-22 have been estimated as 225 GW and 1566 BU respectively. The country has witnessed a massive capacity addition in the recent years and due to that it is on the verge of becoming a power surplus country. The Ministry have further assured that considering the power projects in pipeline, it is expected that the demand of 2021-22 would be fully met. The Committee also note that against the requirement of 864.9 BU, the availability of power remained 858.8 during the year 2016-17 (upto Dec. 2016)\_leaving a shortage of 0.7%. In respect of peak demand, 1,56,934 MW was met against the demand of 1,59,542 MW leading to a shortage of 1.6%. The Committee are surprised that even after the massive capacity addition and huge present generation capacity, there are still shortages, though their quantum is not so significant. Secondly, in addition to these power demands there exists the latent demand that is not being taken into calculation. These figures do not include the demand that several financially distressed Discoms do not post due to their inability to purchase electricity at higher rates and instead of incurring further losses they opt for power outages. The demand calculation also does not take into account the demands of households which do not have electricity access. The Committee, therefore, while appreciating the fact that power generation sector has come a long way and now it is in a position to cater the demand of power of the country, desire that the momentum of growing generation should be maintained to cater the increased future demand as well as the latent demand of electricity of country which is going to surface sooner than later. The Committee also recommend that the Government should encourage installation of power generation projects which are clean and green, strategically important a capable of providing electricity at lower tariff.

#### **Reply of the Government**

It may be submitted that 0.7% shortage in terms of energy in the country is not due to non-availability of power in the country. A number of thermal power plants in the country are under reserve shutdown and those in operation are running at low PLF due to less requisition of power by the DISCOMs in a few states. Therefore, adequate power is available in the country but it is learnt that DISCOMs give less requisition of power as they are unable to supply additional power to their consumers due to constraints in their transmission/distribution network. Some DISCOMs are unable to purchase additional power due to financial constraints. Even in those states, where there are no such constraints, forced outage of a transmission line/distribution feeder/ distribution transformer leads to load-shedding in some areas until restoration of such elements. The quantum of electricity which could not be supplied to the consumers due to such instances also reflects in power supply position as shortage, which actually is the demand-supply gap due to forced outage of transmission/distribution element and not due to shortage of power.

[F. No.10/2/2017-Budget Date7/6/2017]

# <u>Comments of the Committee</u> (Please see Para No. 8 of Chapter – I of the Report)

## (Recommendation Sl.No. 15, Para No.2.15)

The Committee are distressed to note that the plant load factors (PLF) of thermal power plants touched a record low and dipped below 60% during the previous year. The Committee also note that there are several power plants that are running at 0-40% of PLF. The ministry have tied to alleviate the concern of the committee by stating that today we have a scenario where we have got sufficient capacity, so PLF per se cannot be the indicating factor of the health of the power sector. One can always debate whether this excess capacity available in the system is good or not. They have further stated that due to huge upcoming renewable energy capacity, it is possible that the PLF of thermal power plants could go as low as 50% or even below. Since solar energy will be available in the day time so thermal power plants will have to be shut down or run at low capacity at that time. The committee feel that this is not the desired scenario as it is known that underutilization of power plant will only lead to higher tariff rates. The committee do understand that setting up power stations is a de licensed activity, so everybody is free to install power stations as per their need or business prospect. In a free business model, it is also understood that only those power plants will survive which will be able to sell electricity at cheaper rate and thus bringing competitiveness in the market. Considering all this the committee are astonished that despite abundance of power generation capacity in the country at present, the tariff rates have not gone down, rather there is a increasing trend in this regard. Even the technological advancement of machinery, use of super critical technology, ease in supply constraints of coal have failed to lower tariff rates. The committee are of definite opinion that the prime

reason for higher tariff is lower PLF. The committee have been apprised that though the tariff is higher for long term PPA, electricity is available in power exchanges at much lower price. This situation encourages Discoms not to go for a long term PPA, but fulfil their demand by short term power purchases as much as possible. The Committee feel that prima facie the situation might appear beneficial for Discoms/ power sector but may have long term adverse consequences. The power sector seems to be trapped in a vicious cycle of low PLF causing high tariff and high tariff suppressing the demand. The committee are concerned that if this situation persist this may lead to plethora of problems viz. Shutting down of power plants due to economical un-viability, loans turning bad and further investment in the sector may be discouraged due to low returns. The committee are in favour of promoting competition in the sector that should lead to availability of cheaper power, those who will be able to do this will survive while rest will perish. However, the committee also desire that the Ministry should ensure that this transition should take place without harming and discouraging further investment in the power sector.

## **Reply of the Government**

At present, majority of the power procured by Discoms is on the basis of long term PPAs with two-part tariff and only small part of the power requirement is being procured through market. Thus, payment of fixed charges to a power station under long-term PPA depends on availability and not on actual energy generated. A system in which entire wholesale market for electricity is based on competition would require major changes in legal and regulatory framework.

Station wise % PLF of Coal based stations for 2016-17 and 2015-16 are given at Annexure.

[F.No.10/2/2017–Budget Date7/6/2017]

<u>Comments of the Committee</u> (Please see Para No. 11 of Chapter – I of the Report)

## (Recommendation Sl.No. 18, Para No.2.18)

The Committee feel that the issues which are of vital importance and have been discussed in several meetings of the Committee also require specific response of the government for the balanced and sustainable growth of the power sector in the country. The Committee note that as of now there are two most prevalent methods for discovering the tariff in the power sector (i) cost Plus Tariff and (ii) tariff by competitive Bidding of which Cost plus system is pre-dominant. The committee are aware that in this method coal charges consists around 70 per cent of the total cost of power for tariff determination. They are termed as energy charges whereas rest of the tariff consist of fixed charges and other miscellaneous ingredients. The Tariff Policy as announced by the government of India aims at promoting competitive bidding for all acquisitions in power plants and also for tariff determination through competitive bidding. Competitive bidding process ensures that the tariff determination process is reasonable, rational and competitive without any scope for latent manoeuvring. The process also ensures that all the expenditure are taken into account and this is beneficial to consumer as well as to the generator. The transparency in the system also forms part of this process and thus leaving no scope for any extraneous consideration. The committee are unable to apprehend as to why hydro sector has been kept out of its ambit particularly when the tariff policy aims to make entire system in the electricity sector completion based. There may be good reasons to exclude the hydro sector from the competitive bidding process, but there are equally genuine reasons for including it within the competitive ambit to make it efficient, transparent and delivery oriented. Several countries like United Kingdom and Brazil have taken hydro into the competitive fold and are doing excellent. The committee, therefore, recommend that the price discovery for any kind of electricity whether thermal, hydro, renewable, etc., should be done through process of competitive bidding only.

## **Reply of the Government**

The Tariff Policy 2016 provides that barring certain exceptions, all future requirement of power should continue to be procured competitively by distribution licensees. As far as Renewables is concerned, solar parks are already being set up through competitive bidding and this process has started for wind generation also. However, tariff for waste-to-energy plants shall be determined on cost-plus basis.

The hydro-electric power plants face significant uncertainty during construction, particularly in the Himalayan region. In addition, the problem of R&R, law & order, land acquisition etc. are much more severe in case of hydro-electric projects as compared to other type of projects. In spite of necessary investigations prior to commencement of construction, many a times geological surprises are

encountered which often lead to delay as well as increase in project costs. In view of this, bidders may not be able to assess their costs and resulting tariff with reasonable certainty. If hydro projects are subjected to competitive bidding, bidders would factor-in a risk premium in the tariff quoted, leading to discovery of higher tariff. In view of this, hydro projects have been granted exemption from competitive bidding subject to certain conditions in the Tariff Policy, 2016.

[Ministry of Power F. No.10/2/2017- Budget Date7/6/2017]

# <u>Comments of the Committee</u> (Please see Para No. 14 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 <u>4 August, 2017</u> Shravana 13, 1939 (Saka) Dr. Virendra Kumar Chairperson, Standing Committee on Energy

# **ANNEXURE - I**

Station	wise % PL	Fof COAL based stations for 20 2015-16	016-17 and		
SECTOR	Region	NAME OF THE STATION	Monitored Capacity as on 31.03.2017 MW	% PLF	
				2016-17	2015-16
CENTRAL	NR	BADARPUR TPS	705	27.61	36.19
		DADRI (NCTPP)	1820	54.98	62.85
		INDIRA GANDHI STPP	1500	41.66	44.01
		RIHAND STPS	3000	83.56	79.9
		SINGRAULI STPS	2000	86.87	92.61
		TANDA TPS	440	84.1	80.88
		UNCHAHAR TPS	1550	76.03	76.04
	WR	BHILAI TPS	500	83.36	80.82
		KORBA STPS	2600	89.41	89.45
		MAUDA TPS	2320	42.13	21.31
		SIPAT STPS	2980	91.09	85.14
		VINDHYACHAL STPS	4760	77.24	79.46
	SR	KUDGI STPP	1600	0	
		RAMAGUNDEM STPS	2600	86.04	88.67
		SIMHADRI	2000	80.9	82.36
		TUTICORIN (JV) TPP	1000	71.37	56.18
		VALLUR TPP	1500	70.1	58.57
	ER	BARH II	1320	66.09	67.74
		BOKARO `B` TPS	630	26.39	33.61
		BOKARO TPS `A` EXP	500	55.91	0
		CHANDRAPURA(DVC) TPS	760	74.13	64.96
		DURGAPUR STEEL TPS	1000	75.98	50.55
		DURGAPUR TPS	210	23.64	30.28
		FARAKKA STPS	2100	74.71	67.01
		KAHALGAON TPS	2340	77.8	74.32
		KODARMA TPP	1000	43.4	37.87
		MEJIA TPS	2340	63.11	58.31
		MUZAFFARPUR TPS	610	39.04	40.31
		NABI NAGAR TPP	250	0	0
	-	PATRATU TPS	455	7.86	8.78
		RAGHUNATHPUR TPP	1200	19.18	0
	1	TALCHER (OLD) TPS	460	93.3	92.33

		TALCHER STPS	3000	86.94	90.95
	NER	BONGAIGAON TPP	500	75.64	0
STATE	NR	ANPARA TPS	2630	71.62	83.78
		CHHABRA TPP	1000	77.93	45.44
		GH TPS (LEH.MOH.)	920	33.95	38.83
		GND TPS(BHATINDA)	440	18.12	23.76
		HARDUAGANJ TPS	665	65.66	64.82
		KALISINDH TPS	1200	56.55	67.28
		KOTA TPS	1240	68.92	71.52
		OBRA TPS	1278	34.32	35.27
		PANIPAT TPS	920	27.37	14.27
		PANKI TPS	210	41.45	29.06
		PARICHHA TPS	1140	61.47	67.58
		RAJGHAT TPS	135	0	3.93
		RAJIV GANDHI TPS	1200	36.69	43.97
		ROPAR TPS	1260	25.15	35.77
		SURATGARH TPS	1500	34.06	45.18
		YAMUNA NAGAR TPS	600	65.15	76.97
	WR	AMARKANTAK EXT TPS	210	80.51	61.6
		BHUSAWAL TPS	1420	49.2	64.83
		CHANDRAPUR(MAHARASHTRA)	2920	64.64	59.18
		DSPM TPS	500	90.92	90.74
		GANDHI NAGAR TPS	630	29.83	35.75
		KHAPARKHEDA TPS	1340	65.72	69.3
		KORADI TPS	2600	35.84	20.2
		KORBA-II	200	51.01	45.22
		KORBA-III	240	66.45	68.51
		KORBA-WEST TPS	1340	78.68	76.85
		MARWA TPS	1000	32.42	0
		NASIK TPS	630	60.32	78.21
		PARAS TPS	500	68.24	79.97
		PARLI TPS	1170	17.22	13.3
		SANJAY GANDHI TPS	1340	58.3	59.92
		SATPURA TPS	1330	31.28	47.15
		SHRI SINGHAJI TPP	1200	23.54	40.32
		SIKKA REP. TPS	740	33.14	17.29
		UKAI TPS	1350	44.78	46.84
		WANAKBORI TPS	1470	30.52	43.86
	SR	BELLARY TPS	1700	67.22	69.55
		DAMODARAM SANJEEVAIAH TPS	1600	62.82	41.59
		Dr. N.TATA RAO TPS	1760	75.58	78.09
		ENNORE TPS	340	5.07	11.19
		KAKATIYA TPS	1100	68.27	72.96

		KOTHAGUDEM TPS	720	62.85	70.1
		KOTHAGUDEM TPS (NEW)	1000	75.18	75.55
		METTUR TPS	1440	72.75	78.3
		NORTH CHENNAI TPS	1830	62.96	68.1
		RAICHUR TPS	1720	76.3	75.61
		RAMAGUNDEM - B TPS	62.5	82.87	72.75
		RAYALASEEMA TPS	1050	72.97	79.07
		SINGARENI TPP	1200	80.67	0
		TUTICORIN TPS	1050	60.31	76.79
		YERMARUS TPP	1600	0	0
	ER	BAKRESWAR TPS	1050	76.65	72.31
		BANDEL TPS	450	47.82	28.03
		BARAUNI TPS	210	7.14	0
		D.P.L. TPS	660	37.07	21.68
		IB VALLEY TPS	420	87.94	84.5
		KOLAGHAT TPS	1260	54.7	52.1
		SAGARDIGHI TPS	1600	71.78	51.52
		SANTALDIH TPS	500	51	42.95
		TENUGHAT TPS	420	38.69	71.47
Ρ٧Τ	NR	ANPARA C TPS	1200	80.4	81.95
		BARKHERA TPS	90	49.71	43.05
		GOINDWAL SAHIB TPP	540	4.32	0
		KAWAI TPS	1320	71.69	74.9
		KHAMBARKHERA TPS	90	47.6	40.58
		KUNDARKI TPS	90	58.45	47.36
		LALITPUR TPS	1980	37.83	0
		MAHATMA GANDHI TPS	1320	25.04	42.71
		MAQSOODPUR TPS	90	52.92	39.54
		PRAYAGRAJ TPP	1320	48.89	17.99
		RAJPURA TPP	1400	76.99	62.64
		ROSA TPP Ph-I	1200	75.28	66.97
		TALWANDI SABO TPP	1980	46.55	39.62
		UTRAULA TPS	90	52.64	52.04
	WR	AKALTARA TPS	1200	64.05	60.41
		AMARAVATI TPS	1350	15.85	52.11
		ANUPPUR TPP	1200	35.77	61.51
		AVANTHA BHANDAR	600	53.64	20.01
		BALCO TPS	600	60.76	72.83
		BANDAKHAR TPP	300	53.48	0
		BARADARHA TPS	1200	68.38	45.25
		BELA TPS	270	0	0
		BINA TPS	500	18.56	29.78
		BUTIBORI TPP	600	71.2	76.47

		CHAKABURA TPP	30	92.44	91.47
		DAHANU TPS	500	85.45	87.09
		DHARIWAL TPP	600	29.33	7
		EMCO WARORA TPS	600	70.46	76.02
		GEPL TPP Ph-I	120	0	0
		JSW RATNAGIRI TPP	1200	63.56	79.64
		KASAIPALLI TPP	270	85.08	80.38
		KATGHORA TPP	35	0	0
		MAHAN TPP	600	50.02	0
		MIHAN TPS	246	0	0
		MUNDRA TPS	4620	74.86	81.3
		MUNDRA UMTPP	4000	78.37	73.09
		NASIK (P) TPS	540	0	0
		NAWAPARA TPP	300	44.57	
		NIGRI TPP	1320	62.85	0
		NIWARI TPP	45	60.19	35.91
		OP JINDAL TPS	1000	51.17	58.59
		PATHADI TPP	600	84.64	56.63
		RAIKHEDA TPP	1370	9.62	12.98
		RATIJA TPS	100	72.15	62.08
		SABARMATI (C STATION)	60	0	9.83
		SABARMATI (D-F STATIONS)	362	87.01	75.52
		SALAYA TPP	1200	49.59	47.3
		SALORA TPP	135	0	0
		SASAN UMTPP	3960	84.79	90.84
		SEIONI TPP	600	5.4	0
		SVPL TPP	63	54.91	10.67
		SWASTIK KORBA TPP	25	0	0
		TAMNAR TPP	2400	29.77	27.86
		TIRORA TPS	3300	61.03	68.36
		TROMBAY TPS	1250	41.33	44.15
		UCHPINDA TPP	720	2.18	4.52
		WARDHA WARORA TPP	540	29.49	39.16
S	SR	ITPCL TPP	1200	49.29	0
		MUTHIARA TPP	1200	35.66	0
		PAINAMPURAM TPP	1320	78.35	75.11
		SGPL TPP	1320	62.7	
		SIMHAPURI TPS	600	30.78	75.66
		THAMMINAPATNAM TPS	300	52.27	64.48
		TORANGALLU TPS(SBU-I)	260	75.3	95.66
ļ		TORANGALLU TPS(SBU-II)	600	51.38	86.74
		TUTICORIN (P) TPP	300	0.9	30.37
		UDUPI TPP	1200	74.92	76.72

Note:	PLF FOF	R THERMAL STATIONS OF 25 MW AND	D ABOVE ONLY aft	er declaratio	on of COD
COAL Total			184846.5	59.64	62.01
		UTKAL TPP(IND BARATH)	350	0	0
		TITAGARH TPS	240	11.07	31.49
		STERLITE TPP	1200	11.63	38.31
		SOUTHERN REPL. TPS	135	34.73	44.8
		MAITHON RB TPP	1050	79.98	78.13
		MAHADEV PRASAD STPP	540	68.86	61.68
		KAMALANGA TPS	1050	64.5	67.6
		JOJOBERA TPS	360	49.57	79.68
		HALDIA TPP	600	76.4	68.94
		DERANG TPP	1200	61.98	59.23
		CHINAKURI TPS	30	0	0
	ER	BUDGE BUDGE TPS	750	82.36	87.94
		VIZAG TPP	1040	38.61	37.21

# MINUTES OF THE TWENTY SECOND SITTING OF THE STANDING COMMITTEE ON ENERGY HELD ON 4TH AUGUST, 2017 AT 1030 HOURS IN COMMITTEE ROOM NO '1', BLOCK A, PARLIAMENT HOUSE ANNEXE EXTENSION, NEW DELHI

The Committee sat from 1030 hours to 1100 hours.

# PRESENT

# Dr. Virendra Kumar - Chairperson LOK SABHA

- 2. Shri Om Birla
- 3. Shri M. Chandrakasi
- 4. Shri Harish Chandra alias Harish Dwivedi
- 5. Shri Bhagat Singh Koshyari
- 6. Dr. Arun Kumar
- 7. Kunwar Sarvesh Kumar
- 8. Shri Jagdambika Pal
- 9. Shri Ravindra Kumar Pandey
- 10. Shri Gutha Sukhender Reddy
- 11. Shri Conrad Kongkal Sangma
- 12. Shri Devendra Singh *Alias* Bhole Singh
- 13. Shri Bhanu Pratap Singh Verma

# **RAJYA SABHA**

- 14. Shri Oscar Fernandes
- 15. Shri La. Ganesan
- 16. Shri Javed Ali Khan
- 17. Shri S.Muthukaruppan
- 18. Dr. Anil Kumar Sahani

# **SECRETARIAT**

- 1. Shri N.K. Pandey Director
- 2. Smt. L. Nemjalhing Haokip Under Secretary

At the outset, the Chairperson welcomed the Members who made it convenient to attend the sitting of the Committee. Thereafter, the Committee considered the Draft Reports on: (i) National Electricity Policy – A Review

(ii) Action Taken on the recommendations contained in the Twenty-Sixth Report (16 Lok Sabha) on Demands for Grants of the Ministry of Power for the year 2017-18.

2. After detailed deliberations, the Committee adopted the draft reports without any modification. The Committee authorized the Chairperson to finalize the Reports and present the same to Lok Sabha/ lay in Rajya Sabha.

Thereafter, the Committee adjourned with a vote of thanks by the Chair.

# **APPENDIX II**

# (Vide Introduction of Report)

# ANALYSIS OF ACTION TAKEN BY THE GOVERNMENT ON THE OBSERVATIONS/ RECOMMENDATIONS CONTAINED IN THE TWENTY SIXTH REPORT (16<sup>TH</sup> LOK SABHA) OF THE STANDING COMMITTEE ON ENERGY

(i)	Total number of Recommendations	21			
(ii)	Observations/Recommendations which have been accepted by the Government:				
	Serial Nos.1,2,3,4,5,6,7,8,9,10,11,12,13,16,17,19,20 and Total: Percentage	21 18 86%			
(iii)	Observations/Recommendations which the Committee do not desire to pursue in view of the Government's replies:				
	Nil Total: Percentage	0 0%			
(iv)	Observations/Recommendations in respect of which the replies of the Government have not been accepted by the Committee and which require reiteration: SI. Nos. 14,15, and 18				
	Total: Percentage	03 14%			
(v)	Observations/Recommendations in respect of which final replies of the Government are still awaited:				
	Nil				
	Total:	0			
	Percentage	0%			