

STANDING COMMITTEE ON ENERGY (2010-11)

FIFTEENTH LOK SABHA

MINISTRY OF POWER

[Action Taken on the recommendations contained in the Fifth Report (15th Lok Sabha) on Demands for Grants of the Ministry of Power for the year 2010-11]

TWELFTH REPORT



LOK SABHA SECRETARIAT NEW DELHI

December, 2010/Agrahayana, 1932 (Saka)

TWELFTH REPORT

STANDING COMMITTEE ON ENERGY (2010-11)

(FIFTEENTH LOK SABHA)

MINISTRY OF POWER

[Action Taken on the recommendations contained in the Fifth Report (15th Lok Sabha) on Demands for Grants of the Ministry of Power for the year 2010-11]

> Presented to Lok Sabha on 02.12.2010 Laid in Rajya Sabha on 02.12.2010



LOK SABHA SECRETARIAT NEW DELHI

December, 2010/Agrahayana, 1932 (Saka)

C.O.E. No. 200

Price : Rs. 55.00

© 2010 By Lok Sabha Secretariat

Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha (Fourteenth Edition) and printed by Jainco Art India, New Delhi-110 005.

CONTENTS

PAGE

COMPOSITION OF	тне Сомміттее (2010-11) (ііі)
INTRODUCTION	
CHAPTER I	Report 1
Chapter II	Recommendations/Observations which have been accepted by the Government
Chapter III	Recommendations/Observations which the Committee do not desire to pursue in view of the Government's replies
Chapter IV	Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee and require reiteration
Chapter V	Recommendations/Observations in respect of which final replies of the Government are still awaited
	Appendices
I.	Minutes of the Sitting of the Committee held on 25.11.2010
П.	Analysis of Action Taken by the Government on the Recommendations/Observations contained in the 5th Report (15th Lok Sabha) of the Standing Committee on Energy

COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2010-11)

Shri Mulayam Singh Yadav — Chairman

MEMBERS

Lok Sabha

- 2. Mohammad Azharuddin
- 3. Shri S.K. Bwiswmuthiary
- 4. Shri P.C. Chacko
- 5. Shri Adhir Ranjan Chowdhury
- 6. Shri Ram Sundar Das
- 7. Shri Paban Singh Ghatowar
- **8. Shri Chandrakant B. Khaire
- ***9. Shri Syed Shahnawaz Hussain
 - 10. Shri Shripad Yesso Naik
 - 11. Shri Sanjay Nirupam
 - 12. Shri Jagdambika Pal
 - 13. Shri Ravindra Kumar Pandey
 - 14. Shri Nityananda Pradhan
 - 15. Shri M.B. Rajesh
 - 16. Shri K. Chandrasekhar Rao
 - 17. Dr. K.S. Rao
 - 18. Shri Ganesh Singh
 - 19. Shri Radha Mohan Singh
 - 20. Shri Vijay Inder Singla
 - 21. Shri E.G. Sugavanam

Rajya Sabha

- 22. Shri Govindrao Adik
- 23. Shri V.P. Singh Badnore
- *24. Shrimati Shobhana Bhartia
- 25. Shri Shyamal Chakraborty

- 26. Shri Rama Chandra Khuntia
- 27. Shri Bhagat Singh Koshyari
- 28. Shri Jesudasu Seelam
- *29. Shri Mohammad Shafi
- 30. Shri Motilal Vora
- 31. Shri Veer Pal Singh Yadav

Secretariat

1.	Shri	Brahm Dutt	—	Joint Secretary
2.	Shri	N.K. Pandey	—	Additional Director

3. Smt. Neena Juneja — Committee Officer

^{*}Nominated w.e.f. 22.9.2010

^{**}Nominated w.e.f. 27.9.2010 vis Shri Subhash Bapurao Wankhede left the Committee.

^{***}Nominated w.e.f. 18.10.2010 vis Shri Arjun Munda left the Committee.

INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this 12th Report on the action taken by the Government on the recommendations contained in 5th Report of the Standing Committee on Energy (15th Lok Sabha) on Demands for Grants of the Ministry of Power for the year 2010-11.

2. The 5th Report was presented to the Lok Sabha on 21st April and laid in Rajya Sabha on 22nd April, 2010. Replies of the Government to all the recommendations contained in the Report were received on 5th August, 2010.

3. The Report was considered and adopted by the Committee at their sitting held on 25.11.2010.

4. An Analysis on the Action Taken by the Government on the recommendations contained in the 5th 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>1 December</u>, 2010 <u>10 Agrahayana</u>, 1932 (Saka) MULAYAM SINGH YADAV, Chairman, Standing Committee on Energy.

CHAPTER I

REPORT

The Report of the Committee deals with the Action Taken by the Government on the recommendations contained in the Fifth Report (15th Lok Sabha) of the Standing Committee on Energy on Demands for Grants of the Ministry of Power for the year 2010-11.

2. The Fifth Report was presented to Lok Sabha on 21.04.2010 and was laid on the Table of Rajya Sabha on the same day. It contained 12 Recommendations/Observations.

3. Action taken notes in respect of all the observations/ recommendations contained in the Report have been received from the Government. These have been categorized as follows:—

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

Sl. Nos. 5, 7, 8, 9, 10 and 11.

Total=6

(Chapter-II)

(ii) Observation/Recommendation which the Committee do not desire to pursue in view of the Government's reply:Sl. No. Nil.

Total=0

(Chapter-III)

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

Sl. Nos. 1, 2, 3, 4, 6 and 12.

Total=06

(Chapter-IV)

(iv) Observations/Recommendations in respect of which the final replies of the Government are still awaited:Sl. Nos. Nil.

Total=0 (Chapter-V) 4. The Committee desire that utmost importance should be given to the implementation of recommendations made by them. In cases, where it is not possible for the Government to implement the recommendations in letter and spirit for any reasons, the matter should be reported back to the Committee in time along with reasons for their non-implementation. The Committee also desire that the Government should furnish final replies to the recommendations in respect of which Government has furnished interim replies.

5. The Committee will now deal with action taken by the Government on some of their recommendations:

MONITORING OF PROJECTS IN THE POWER SECTOR

Recommendation (Sl. Nos. 1 and 2, Para Nos. 2.1 & 2.2)

6. The Committee noted that the Planning Commission had fixed a capacity addition target of power generation at 78,700 MW for the 11th Plan period (2007-12). According to the assessment made by the Central Electricity Authority (CEA) at the time of Mid-Term Appraisal of the 11th Plan, 62,374 MW of capacity addition is likely to be commissioned with a high level of certainty during the 11th Plan period. Going by the achievements made so far, the Committee are not fully convinced about the Government's claims of achieving even the reduced target of 62,374 MW as the term 'high level of certainty' itself exposes the very fact that Government itself is not very sure for achieving the set targets. Out of 62,374 MW a capacity addition of only 20,352 MW which is merely 32.62% of the target has been achieved till 11.02.2010 i.e. during the first three years of the Plan period. The Ministry of Power have stated that they have taken steps to overcome the problems. The Ministry have also constituted an advisory group under Chairmanship of Minister of Power with retired Power Secretaries as Members to suggest ways and means to achieve the capacity addition target. Similarly a Group has been constituted under Secretary (Heavy Industry) to finalize an action plan which would lay down the schedule/time frame for completion of projects as per targets. This Group under Secretary (Heavy Industry) also includes the Secretary (Power), Chairperson (CEA), CMDs of NTPC and BHEL. Also the Committee have been informed that meetings are held periodically with concerned Ministries viz the Ministry of Coal, the Ministry of Petroleum and Natural Gas and the Ministry of Environment and Forests. The Committee wanted to be informed of the action Plan suggested by the above advisory groups and

implementation thereof to achieve the capacity addition targets for the 11th Plan. The Committee also brought out that prospective planning has not been done and executed properly in the case of the 11th Plan period by the Ministry of Power because the factors stated for delay in capacity addition could not have cropped up suddenly. The Committee accordingly, strongly recommended that to achieve the revised target of capacity addition during the remaining period of the 11th Plan a thoughtful time bound, coordinated and accountable action plan taking into account all the contingencies experienced hitherto in execution of the Plan should be chalked out. The implementation of such programme should be closely monitored on monthly basis for target achievement.

7. The Committee were unable to comprehend the reasons given for non-performance of NHPC, NEEPCO and DVC. The Committee therefore, strongly recommend that in due discharge of their assigned responsibilities, the Ministry should not only monitor the progress in the target achievements of various PSUs under their administrative control, but should also play a pro-active role by giving meaningful guidance and supplementing the efforts of PSUs wherever required in interacting with State Governments or other agencies in the pursuit of the timely execution of the schemes of the capacity addition so that avoidable bottlenecks do not hinder the progress of schemes. Needless to point out that MoUs signed between PSUs and the Ministry should take care of all such factors and there should not be further excuses for non-performance.

8. The Ministry in their Action Taken Reply have stated:

"The following steps have been taken by the Government to achieve the capacity addition target during the Eleventh Five Year Plan and to make the country self sufficient in power:—

(a) Monitoring mechanism in the Ministry has been strengthened. The progress of generation projects for completion during 11th Five Year Plan is reviewed periodically by the Central Electricity Authority, Ministry of Power and Power Projects Monitoring Panel (PPMP). An Advisory Group under the Chairmanship of Hon'ble Minister of Power with retired power secretaries amongst others has been set up to suggest ways and means to achieve the 11th Plan capacity addition targets. Weekly review meetings are also being taken by Secretary (Power) to monitor the capacity addition programme.

- (b) Bharat Heavy Electricals Limited (BHEL) is a major indigenous manufacturer for main plant equipment in Public Sector. BHEL has enhanced its capacity to deliver 15,000 MW of main plant equipment per annum and may raise this capacity up to 20,000 MW by March, 2012 depending upon the market demand.
- (c) The issue of supply of equipments by BHEL has been discussed in the Committee of Secretaries chaired by the Cabinet Secretary on December 8, 2009. In pursuance of the decision taken in the meeting, a Group under the Chairmanship of Secretary (Heavy Industry) to finalize a joint action plan which would lay down the schedule/ timeframe for completion of projects as per targets has been set up. Members of the Group include Secretary (Power), Chairperson, CEA, CMD, NTPC and CMD, BHEL.
- (d) A Joint Venture Agreement has been signed between NTPC Ltd. and BHEL to take up work related to Engineering, Procurement and Construction (EPC) for power plants and other infrastructure projects. BHEL have entered into collaboration with Alstom for supercritical boilers and Siemens for supercritical turbine-generators.
- (e) Joint Ventures have been formed between M/s L&T & MHI, Japan; Alstom & Bharat Forge; Toshiba & JSW; and Ansaldo & GB Engineering for manufacture of supercritical boilers and turbine generators in India. In addition, JV agreement has been signed between Thermal Babcock and Wilcox for manufacture of boilers.
- (f) All stakeholders have been sensitized towards enlarging the vendor base so as to meet the Balance of Plants (BoP) requirements.
- (g) Bulk ordering of 11 units of 660 MW each with supercritical technology with mandatory phased indigenous manufacturing Programme initiated to promote indigenous manufacturing.
- (h) To overcome the shortage of skilled manpower, 'Adopt an ITI' initiative has been taken up.
- (i) Periodical meetings are held with concerned Ministries viz. Ministry of Coal, Ministry of Petroleum and Natural Gas and Ministry of Environment and Forests and at other forums at highest level to sort out the inter-ministerial issues

with regard to availability of fuel and grant of Environment & Forest clearance to generation projects.

In addition to this, to ensure that the capacity addition targets are realized and projects are commissioned as per schedule, an Accountability System has been put in place for the Eleventh Plan Central Sector Power projects scheduled for commissioning during the Eleventh Five Year Plan period."

9. The Ministry have also informed:

"The progress of the projects is monitored against the detailed milestones which *inter-alia* include schedules for supply of critical equipment and important construction/commissioning activities. Efforts are also made to facilitate resolution of issues/constraints arising during project execution relating to Governmental & other agencies.

In case of the issues which involve various State Governments where the projects are located, interaction at the highest level including at the level of Honorable Minister is arranged to resolve the issues/impediments in the completion of the project. Further, an Advisory Group under the Chairmanship of Minister of Power has been set up to advice on expeditious completion of ongoing projects."

10. The Committee were apprehensive about the achievement of targets for the 11th Plan period noting that out of a target of 62374 MW only a capacity addition of 20352 MW which is only 32.62% of the target was achieved upto 11.02.2010 (first three years of the plan period). Various measures have been stated to be taken for capacity addition which inter-alia include constitution of a group under Chairmanship of Minister of Power consisting of former Power Secretaries, review for completion by Central Electricity Authority, weekly review meeting by Power Secretary, supply of equipments by BHEL, constitution of Joint Venture agreement between NTPC, BHEL, enlargement of vendor base, Joint Venture with L&T and MHI Toshiba and JSW etc., adoption of ITIs etc. However, The Committee have not been informed about the result achieved through the stated measures taken so far. The Committee would, therefore, await necessary details of the results of the various measures/steps taken including the recommendations/directions given by the Advisory Group and Group appointed under the Secretary, Heavy Industry.

The Committee therefore, reiterate that to achieve the revised targets of capacity addition during the remaining period of 11th Plan, a time bound, co-ordinated and accountable action plan has to be drawn having no excuses or *alibis* for any lapse in achievement of the target. The Committee may be informed of action plan drawn so far and accountability system put in place for the 11th Plan Central Sector Projects at the earliest.

NATIONAL ELECTRICITY FUND

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

11. The Committee noted that the Ministry of Power have in their Demands for Grants 2010-11 sought Gross Budgetary Support (GBS) of Rs. 10,630.00 crore (net receipt) with a provision of Rs. 6,201.16 crore in revenue and Rs. 4,428.84 crore in capital section. The Annual Plan Outlay of the Ministry for the year 2010-11 approved by the Planning Commission was Rs. 60,751.42 crore against a proposal of Rs. 64,551.92 crore. The reasons for lower allocation than the proposed had been attributed to the, fact that funds under the National Electricity Fund (NEF) i.e. Rs. 227.64 crore as against the proposed outlay of Rs. 5063 crore only on the ground of re-casting the scheme so as to make it applicable to loans from banking sector and other financial institutions for distribution work along with non-APDRP as against Transmission and Distribution in earlier proposals. The Committee were concerned at the fact that modalities of the scheme for generation of funds and disbursement as loans for the important sector of transmission and distribution had not been worked out so far. The Committee recommended that the schemes under National Electricity Fund be finalized at the earliest so that work on this important sector can progress early.

12. The Ministry in their reply have stated:

"In pursuance of the announcement made in the budget (2008-09) for creation of a National Electricity Fund (NEF) for providing loan to the States for improving their distribution/transmission infrastructure, a Committee under the Chairmanship of the Member (Power), Planning Commission was constituted.

Based on the recommendations of the Committee, an EFC Memo was circulated on 09.09.2009 for appraisal among the scrutinizing

agencies. Based on the comments received from scrutinizing agencies, a revised EFC Memo with a total interest subsidy of Rs. 18,438 crore spread over 14 years on loan disbursement of Rs. 50,000 crore during XIth Plan was circulated on 5th April, 2010 for seeking comments of the appraising agencies on the proposal so that it can be considered by Expenditure Finance Committee. The revised scheme will cover non-APDRP areas and under this scheme interest subsidy will be provided for investment in distribution sector only. Apart from PFC & REC, it would be open to other commercial banks also. A provision of Rs 227.64 crore is made in BE 2010-11. The proposal is yet to be considered by Expenditure Finance Committee."

13. The Committee find that as against a proposed Annual Plan outlay of Rs. 64,551.92 crore by the Ministry of Power for the year 2010-11 that approved by the Planning Commission was Rs. 60,751.42 crore. The reasons for lower allocation than the proposed one was due to lower allocation under the National Electricity Fund (NEF) i.e. Rs. 227.64 crore as against Rs. 5,063 crore for recasting the scheme so as to make it applicable to loans from the banking sector and other financial institutions for distribution work along with non-APDRP. The Ministry have informed that based on the recommendations of the Committee constituted under the Member (Power), Planning Commission an EFC Memo was circulated on 9.9.2009 among the scrutinizing agency. A revised EFC Memo was also circulated on 5th April, 2010 for seeking comments of the appraising agencies. The proposal of the revised scheme is yet to be considered by the Expenditure Finance Committee. The Committee note that despite a lapse of more than 6 months no progress has been reported in the matter and Expenditure Finance Committee is yet to take a view on the issue. As the scheme relates to the distribution sector and covers the interest component of the investment in the sector, the delay will not only affect the vital reforms in the distribution but also dampen the spirit of investors. Hence, a time-bound and result oriented exercise is the need of the hour. The Committee are anguished to note that there is huge time lapse since the announcement of NEF in 2008-09 and the scheme is yet to take a shape as the Ministry are still involved in working out the modalities. Considering the fact that there has been inordinate delay in creation/operation of the fund, the Committee strongly recommended that modalities of the funds should be worked out and implemented before the next budget session.

UNEVEN UTILIZATION OF FUNDS DURING THE FINANCIAL YEAR

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

14. The Committee were dismayed to note that during the year 2009-10 funds to the tune of Rs. 53,126.27 crore were available with the Ministry of Power and the same were revised to Rs. 45,269.60 crore. However, the actual utilization upto 31st January, 2010 was only Rs. 26,621.43 crore which is only 50.10% of the Budget Estimates for the year 2009-10. Admittedly the reduction in RE in respect of outlay has primarily, been due to low utilization of funds in schemes like RGGVY and R-APDRP. Going by the quarterly utilization of funds during the year 2009-10, the plan expenditure in the first guarter was 7.38% in 1st quater, 15.94% in 2nd quarter and 21.40% in 3rd quarter. On being asked by the Committee about proposed hefty increase in allocation for the year 2010-11 despite the fact that the earlier funds could not be utilized, it has been informed that allocation has been increased for the APDRP scheme and for the National Mission for Enhanced Energy Efficiency and for grant to NHPC for major works for projects of Nimboo Bazgo, Chutak and Kishanganga. The increase under APDRP from Rs. 1,364 crore to Rs. 3,600 crore, from Rs. 185 crore to Rs. 781 crore for NHPC (GBS) and from Rs. 18 crore to Rs. 144 crore to energy conservation should be matched with proper planning. The pace of expenditure was also not as per the guidelines for every quarter and at times frantic efforts are made to rush the money in the last quarter which may not be backed by the corresponding physical achievements. The Committee, therefore, recommended that there should be logical and reasonable co-relation between the funds allocation and vis-à-vis funds utilization and physical achievement of the last year with the proposed allocation for the next financial year. Simply fixing higher target which may be unrealistic result in futile exercise and non-utilization and blocking of scarce resources which could be utilized more gainfully elsewhere. This reflects the poor planning and ill-conceived management on the part of the Government. With a view, to save time, energy and gainful utilization of resources it is imperative to draw a plan which is realistic and attainable. The Committee would like the Ministry to take necessary action accordingly.

15. The Ministry in their reply have stated:

"In this regard it may be stated that the expenditure is planned well in advance at the BE stage and the Monthly Expenditure Plan forms a part of the Detailed Demands for Grants. This is done with a view to ensure expenditure is incurred uniformly throughout the year, without having to rush expenditure in the last quarter. Basically, this acts as a guideline for all implementing Wings/Agencies to ensure uniform expenditure throughout the year. The Wings are also advised to keep pace of expenditure as per the guidelines of the Ministry of Finance.

The last year being the election year, the schedule of the pace of expenditure got disturbed. The major schemes like R-APDRP, RGGVY, are constantly monitored to ascertain the progress of these schemes and it's projects sanctioned, through their Steering Committee and Monitoring Committee respectively. Ministry of Power also monitors the projects relating to training and research through various meeting and discussions. The implementing Agencies like National Power Training Institute (NPTI) & Central Power Research Institute (CPRI) are required to submit progress reports to the Ministry of Power on a regular basis. They are monitored through the Governing Councils headed by Secretary (Power) on a regular basis. The pace of expenditure *vis-à-vis* allotment is also being monitored in Senior Officers Meeting."

16. The Committee had pointed out that funds to the tune of Rs. 53,126.27 crore were available with the Ministry of Power which was later revised to Rs. 45,269.60 crore. However, only Rs. 26,621.43 crore which is less than 50% of the budget estimates for the year 2009-10 could be spent by 31st January, 2010. The Committee had emphasized that the increase in allocation of funds should be matched with proper planning. The Committee noted that the pace of expenditure was also not as per the set guidelines throughout the year. This lacuna has been brought out by the Committee repeatedly during last 2-3 years. However, there is no improvement in evenly expenditure during the year. The reasons adduced by the Ministry now for the continued state of affairs in expenditure are not convincing at all. The Ministry have simply responded by saying that the wings of the Ministry are advised to keep pace of expenditure as per the guidelines of the Ministry of Finance. As the election years are known in advance, the Ministry of Power should have therefore, planned their expenditure in the same way. The Committee once again reiterate that simply fixing higher target, which may be unrealistic may also result in a futile exercise and blocking of resources which may be utilized more gainfully elsewhere. Therefore, it is imperative to draw a plan which is realistic and attainable and the Ministry should strive to achieve the same with stipulated expenditure.

HYDRO POWER GENERATION

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

17. The Committee were anguished to note that hydro power generation has declined during April to December, 2009 as compared to the same period last year by about 7% i.e. to 85471 MU from 92365 MU. The Ministry of Power have stated that hydro power generation in the country is proposed to be stepped up mainly through new hydro capacity addition. During the 11th Plan, a total of 15,627 MW hydro capacity is envisaged to be added, out of which capacity aggregating 3,341 MW has been commissioned and remaining 12,196 MW is under construction. The performance in this regard was far from satisfactory as only about 22% of 11th Plan target has been achieved in the first three years. The remaining target of 12,196 MW in the two years seems highly unlikely to materialize. Despite this performance, the proposed 20334 MW comprising 87 projects in the 12th Plan is highly un-realistic. The Committee have been informed that various steps have been taken to increase hydro generation in the country which include creation of Hydro Power Corporations in the Central Sector and Joint Sector (Central and State), three stage clearance procedure for power projects etc. The Committee also observed that private participation in hydro generation has been encouraged considerably, presumably on the ground of financial constraints as 129 hydro projects aggregating a capacity of 36123 MW have been allotted or identified for implementation in private sector this includes 103 projects aggregating capacity of 31834 MW in the North-East Region. The Committee strongly had recommended that hydro potential of the country should be identified and exploited expeditiously.

18. The Ministry in their reply have stated:

"During the 11th plan period, a total of 15627 MW hydro capacity was envisaged to be added. As on 31.5.2010, 3481 MW (22%) hydro capacity has been commissioned and the remaining 12146 MW is under various stages of construction. Out of which, 4634 MW is expected to be commissioned with high degree of confidence & 2070 MW is expected to be commissioned with best efforts. Projects totaling 5442 MW are at various stages of construction and expected to be commissioned in the early stages of 12th plan is as under.

12th Plan. Hydro Capacity Addition

The status of proposed candidate 87 hydro projects of 20334 MW for benefits during 12th plan is given below. These projects are regularly monitored in order to finalize a realistic figure of hydro capacity addition during 12th plan.

S. No	Particulars	Central Sector		State Sector		Private Sector		Benefit in 12th Plan (MW)	
		No.	MW	No.	MW	No.	MW	No.	MW
1.	Under Construction	2	440	3	555	7	1045	12	2040
2.	Concurred by CEA/ Approved by State Govt.	9	3106	7	1211	11	3823	27	8140
3.	DPR Prepared								
(a)	DPR under examination in CEA	3	2020	3	620	6	1010	12	3650
(b)	DPR under examination in State Govt.	1	56	2	133	1	60	4	249
(c)	DPR under revision	3	1372	7	1670	3	956	13	3998
	Subtotal(3)	7	3448	12	2423	10	2026	29	7897
4.	DPR yet to be made	1	40	9	1350	9	867	19	2257
	Total(1-4)	19	7034 (35%)	31	5539 (27%)	37	7761 (38%)	87	20334 (100%)

The NE region (including Sikkim) accounts for more than 60% of the overall hydro electric potential identified in the country. Almost 80% of the schemes allotted to Private Sector for implementation during 12th Plan and beyond lie in this region. Steps are being taken in order to expedite growth of hydro power development in the region so that the potential is harnessed in a most optimum and time-bound manner.

An Inter-Ministerial Group (IMG) was constituted by Ministry of Water Resources (MoWR) on the directions of Prime Minister's Office (PMO) on 7th August, 2009 to evolve a suitable framework to Guide & Accelerate the development of Hydropower in the North East Region (NER).

Further, for speedy hydro potential development a "Task Force on Hydro Project Development" has been constituted in September, 2007 under the Chairmanship of Hon'ble Minister of Power to look into all issues relating to development of hydro power including issues of rehabilitation and resettlement of project affected persons. The second meeting of the Task Force was held on 13.4.2010.

The Government encouraged the participation of private sector to tap up the hydro potential in the country for capacity addition. Further, the State Governments are to ensure that project developers submit the DPRs within the set time frame. The progress of S&I works, preparation of DPRs, concurrence by CEA and implementation of the projects will be monitored by CEA periodically against the set intermediate timelines."

19. The Ministry have informed that during the 11th plan period, a total of 15,627 MW hydro capacity was envisaged to be added out of this as on 31.05.2010, 3481 MW (22%) hydro capacity has been commissioned and the remaining 12,146 MW is under various stages of construction out of which only 4,634 MW is expected to be commissioned with high degree of confidence and 2,070 MW is expected to be commissioned with best efforts. Rest 5,442 MW is expected to be commissioned in 12th Plan. 87 hydro projects of 20,334 MW are planned for 12th plan. These projects are regularly monitored in order to finalize a realistic figure of hydro capacity addition during 12th Plan. Further an Inter-Ministerial Group (IMG) was constituted by the Ministry of Water Resources (MoWR) on 7th August 2009 to evolve a suitable framework to guide and accelerate the development of hydro power in the North East Region (NER). Further a Task Force on Hydro Project Development has been constituted in September, 2007. The second meeting of which was held on 13.4.2010. The Committee find it difficult to understand that even after the constitution of so many high powered Committees and Groups, the desired results in achievement of targets in development of hydro-power in the country have not been achieved. The Committee also note that a lot of emphasis is being given to private participation in the hydro sector. It is a welcome step if private sector plays the role of Capacity Addition in hydro sector as is envisaged and expected of them. However, there is a duality of control with regard to ensuring their accountability for the scheduled completion of projects. The role of State Governments and Central Electricity Authority are overlapping. No penal provisions are there in case of default in timely completion of work by the private sector. The Committee therefore, once again reiterate that hydro power potential in the country should be identified and exploited expeditiously with more concerted efforts by involving all sectors, whether public or private and a transparent mechanism should be in place to ensure the timely completion of the projects followed by coercive measures on default.

ENERGY CONSERVATION

Recommendation (Sl. No. 12, Para No. 2.12)

20. The Committee found that the Bureau of Energy Efficiency were allocated an amount of Rs. 82 crore during 2009-10 and these were revised to Rs. 57.84 crore. This has been attributed to the reasons that under some schemes the price bids were lower than that anticipated earlier and also in Bachat Lamp Yojana, the need for monitoring has been obviated and hence the saving. The Committee find that saving as a result of energy conservation methods during 2007-08 and 2008-09 was 2127 MW. The target for 2009-10 has been kept at 2600 MW. However, the achievement upto 30.9.2009 was only 1348 MW. The Ministry have stated ambitious figures for achievement of savings during the 11th Plan. These include Bachat Lamp Yojana - 4000 MW, standards and labeling scheme - 3000 MW etc., existing buildings - 600 Government Buildings, small and medium industries - 500 MW. The Committee recommend that more steps need to be taken by the Government to achieve the above targets envisaged for the 11th Plan period. The Committee hoped that the Government will look into various aspects of building code to make it mandatory to look into energy conservation while designing buildings both in the Government and other sectors.

21. The Ministry in their reply have stated:

"In order to enhance the efforts to promote energy efficiency during the XI plan period and to achieve the target of reducing consumption by 5% (equivalent to 10,000 MW of avoided capacity) by 2012, BEE has initiated several programmes/schemes targeting the following areas:

- House hold lighting
- Commercial Buildings
- Standards & Labeling of appliances
- · Demand Side Management in Agriculture/Municipalities
- SMEs and Large Industries
- Capacity Building of SDAs

		141 44		Provisional)
	Total	10000 MW	2127.97 MW	2609 MW
07.	State Energy Conservation Fund to ensure sustainability of energy efficiency implementation at the State level.	_		NIL
06.	Capacity Building of State Designated Agencies (SDAs) seeks to enhance their institutional capacities to facilitate them in the implementation of Energy Conservation Act in the respective states.	_	787.43	550
05.	Energy Efficiency in Small & Medium Enterprises (SMEs) to enhance energy efficiency in 25 energy intensive clusters.	500 MW	475	405
04.	Agriculture DSM & Municipal DSM targets replacement of inefficient pump- sets, street lighting etc. in the agricultural and municipal areas.	2000 MW	NIL	NIL
03.	Energy Conservation Building Code sets minimum energy performance standards for new commercial buildings with a connected load of 500 KW. Energy Efficiency is also promoted in existing buildings through retrofitting.	500 MW	6.1	NIL
02.	Standards & Labeling Programme to develop standards for energy efficiency of end-use equipments and provide informative labels.	3000 MW	859.44	1550
01.	Bachat Lamp Yojna to promote energy efficient and high quality CFLs in the household sector.	4000 MW	NIL	104
Sl. No	Name of Scheme	Target (avoided capacity)	Achieved Upto 2008-09	Achieved during 2009-10 (under verification through 3rd party)

A brief over view of the various schemes along with the targeted avoided capacity is indicated below:

The schemes are implemented within the framework of the Energy Conservation Act, 2001. The initiatives taken have resulted in an avoided capacity generation of 2127 MW during the last two years (2007-08 & 2008-09). The fuel savings are nearly 1% of the total fuel use in the country.

Energy Conservation Building Code (ECBC) was launched in May 2007 by the government with the objective of introducing energy conservation interventions at the design stage within new commercial buildings having connected load of 500 KW and above, coming up in five climatic zones of the country.

This code was invoked on a voluntary basis so as to allow sufficient time for the commercial building sector to transform towards adoption of energy efficient designs and technologies and to ensure sufficient capacity building of related professionals like builders, architects and engineers.

Institutional framework with regard to compliance processes and integration of ECBC into building bye-law at the Municipality level are essential before the code is made mandatory. BEE is in the process of developing compliance framework and guidelines for incorporating ECBC into bye-laws."

22. During the 11th Plan Energy Conservation of 10,000 MW has been proposed which includes 4,000 MW for Bachat Lamp Yojana, 3,000 MW for Standards and Labeling Programme, 500 MW for Energy Conservation Building Code, 2,000 MW for Agriculture DSM & Municipal DSM etc. However, the achievements have been rather poor in case of Bachat Lamp Yojana i.e. only 104 MW out of 4,000 MW. Higher targets have been fixed for energy conserved building code, agricultural DSM & Municipal DSM *i.e.* replacement of inefficient pump sets, street lighting etc. in the agriculture sector and Municipal areas. The total achievement is also very dismal. There cannot be any dispute over the fact that energy saved is energy produced. As it is, there are heavy T&D losses in our country and energy conservation is not getting the attention and merits it deserves. Hence, this not only result in avoidable losses but make the electricity costlier to the end user. The Committee, therefore, desire that more efforts are urgently needed to sensitize the people in this regard besides developing and institutionalizing the energy conservation framework on need basis for various schemes to be launched to save energy and helping in conserving Power. For this more publicity through print media and T.V. etc. should be made.

CHAPTER II

OBSERVATIONS/RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

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

The Committee note that the target for capacity addition during 2009-10 was 14507 MW against which the achievement as on 18th March, 2010 has been only 7,965 MW, from all sources viz. hydro, thermal and nuclear. The target for 2010-11 has been kept at 20,359 MW. Although, the Government has assured that they have taken certain steps to adhere to the targets fixed like financial closure of projects and orders for main plants of the projects and tying-up fuel linkages etc., however, certain difficulties like supply of coal and non-availability of clearances from the Ministry of Environment and Forest have been highlighted. The Committee are of the view that Ministry of Environment and Forest should give time bound clearances to projects concerning the power sector. The Committee observe that target fixed for 2010-11 is 20,359 MW whereas it was 14,507 MW in 2009-10 against which only 7,965 MW could be achieved by 18th March, 2010. Despite the reported pro-active action taken by the Government for achievement of target, problems in supply of coal, the mainstay for thermal generation continue to affect the generation. Besides taking up with the Ministry of Coal, the Government should focus on alternative sources like hydel and nuclear to achieve the targets set for 2010-11 as well as for the 11th Plan period.

Reply of the Government

As against the 11th Plan target of 78,700 MW set by the Planning Commission, the CEA has, on the basis of the inputs provided by the project developers and suppliers, assessed that a total capacity of 62,374 MW comprising 8,237 MW hydro, 50,757 MW thermal and 3,380 MW nuclear is likely to be commissioned with a high level of certainty during the 11th Plan period. As against the capacity addition target of 14,507 MW in 2009-10, 9,585 MW of capacity was commissioned.

The important matters requiring attention of the Ministry of Environment and Forests are taken with them through correspondence as well in the meetings from time to time. A meeting of Secretary (Power) with Secretary (MoEF) was held on 28.07.2009. Besides this, Cabinet Secretary took a meeting on 12.04.2010 with Secretaries of MoE&F, Power, Coal, Water Resources and Mines to discuss delay in forest clearances impacting large number of critical infrastructure projects. Principal Secretary to PM took meetings on 16.04.2010 and 21.05.2010 regarding issues concerning environment & forest clearances for coal mines with Secretaries of MoE&F, Power, Coal and Mines.

The gestation period of hydro and nuclear projects is large. Further, only those power projects (hydro, thermal or nuclear projects), which are already in advanced stage of execution can materialize during the years 2010-11 and 2011-12. The hydro capacity addition likely during 2010-11 and 2011-12 is 1436 MW and 3370 MW respectively and the nuclear capacity addition likely during 2010-11 and 2011-12 is 1220 MW and 1500 MW respectively.

[Ministry of Power, OM No.18/3/2010/Budget dated 5.8.2010]

Recommendation (Sl. No. 7, Para No. 2.7)

The Committee note that three UMPPs had already been transferred to the identified developers in Madhya Pradesh, Gujarat and Andhra Pradesh. The fourth UMPP was transferred to the identified developer on 7.8.2009 at Tilaiya in Jharkhand. The Committee also learn that the site for an UMPP in Tamil Nadu at Cheyyur has been approved by the State Government. PFC is taking steps for Environmental Impact Assessment study. In regard to the UMPP in Chhattisgarh, the Ministry have informed that a Special Purpose Vehicle (SPV) named Chhattisgarh Sarguja Power Limited (CSPL) has been created by PFC and the Request for Quotation (RfQ) for this has been issued on 15.3.2010. The UMPP in Karnataka originally was to be located at Tadri, finding the other sites at Kudgi and Munnar as unsuitable, the PFC requested the Chief Secretary, Government of Karnataka to suggest new sites. The Government of Karnataka has intimated that Tadri is most suited site for the UMPP. The Committee have been informed that confidence building measures have been initiated by the Minister of Energy to clear doubts of local residents about the impact of project. However, in regard to the UMPP in Maharashtra, the site has still not been finalized due to various reasons relating to agitation by the local people etc. The Committee once again stress on the fact that the UMPPs will form the back bone of power generation in 12th Plan and therefore, all sites need to be finalized at the earliest and handed over to the respective developers so that they can develop the site in the next five to seven years to make power available at low and competitive rates in the future. The Committee would await conclusive action in the matter.

Reply of the Government

UMPP

Four UMPPs have already been awarded to the developers selected through tariff based competitive bidding. The UMPPs already transferred are Mundra UMPP in Gujarat, Sasan UMPP in MP, Krishnapatnam UMPP in AP and Tilaiya in Jharkhand and are at different stages of implementation.

In regard to four other UMPPs namely UMPP in Chhattisgarh, Orissa, Tamil Nadu, and Second UMPP of Andhra Pradesh, the sites have been finalized. The Request for Qualification (RfQ) bid has been issued for the UMPP proposed in Chhattisgarh. The RfQ for Orissa UMPP has been issued on 11th June, 2010. The bidding process of selection of developer for other three UMPPs is expected to start soon. The status of the UMPPs in pipe line is given as below:

1.0 UMPP in Chhattisgarh:

The EIA report for the power plant has been prepared. RfQ for selection of developer of the project has been issued by PFC on 15.03.2010. However, a reference received from PMO regarding a news article indicating that the coal blocks allocated to this UMPP has been marked as 'no go' by the Ministry of E&F. The matter has been taken up with MoEF for a clarification on the above issue of the twin coal blocks allocated to Chhattisgarh UMPP. Keeping this in mind, the last date of submission of RfQ for this project has been extended by 60 days (from 3rd May, 2010).

2.0 UMPP in Tamil Nadu:

The site for the power plant near Cheyyur in Kancheepuram District and the captive port at Panaiyur village has been finalized and approved by the State Government. Ministry of Environment & Forests has prescribed Terms of Reference (ToR) for the power plant and the captive port. The draft EIA report for the power plant has been prepared and the EIA study for captive port is under progress.

3.0 UMPP in Orissa:

Site near Bedabahal village in Sundergarh district has been finalized. Govt. of Orissa has approved the drawl of water from Hirakund reservoir. Gram Sabhas has been held at site. The RfQ has been issued on 11th June, 2010. 4.0 Additional UMPP in Andhra Pradesh:

The site at Nuyunipalli village in Prakasham distt. has been finalized for 2nd UMPP in consultation with the State Govt. The State Govt. has been requested to expeditiously issue the Section-4 notification.

5.0 UMPP in Karnataka:

The site has not yet been finalized. The State Govt. has been requested to suggest the sites.

6.0 UMPP in Maharashtra:

The State Govt. confirmed the Munge site in Sindhudurg district. The issue of local agitation is still to be resolved by the State Govt. Recently in a meeting on Maharashtra issues chaired by Hon'ble MoP on 17.12.2009, it was decided that Government of Maharashtra (GoM) would sort out the issues related to siting of this UMPP. MoP has again requested the State Govt. to sort out the issues. The response of GoM is awaited.

7.0 Additional UMPPs in Orissa:

Govt. of Orissa had offered five coastal sites which were visited by CEA/PFC team in June, 2009. Certain details sought from the State Govt. have been received. Another site in Bolangir Distt. of Orissa has been visited by the team of CEA and PFC officials on 19.04.2010. Orissa Govt. has been requested to furnish certain details regarding land availability, water availability, environment & forest issues etc. The details are awaited. Further CEA has requested Secretary (Energy), GoO for arranging a meeting at Bhubneshwar with all concerned agencies to finalize the sites.

8.0 Second UMPP in Gujarat:

Govt. of Gujarat had proposed four alternative sites for the second UMPP. CEA/PFC team has visited two sites and CEA has requested Govt. of Gujarat *vide* letter dated 12.02.2010 to furnish certain details to assess the suitability of the sites which are awaited. For remaining two sites, Gujarat Power Corporation Ltd. intimated that the earlier identified sites have certain issues concerning Defence/Wild life sanctuary and that they would identify new alternate sites and will submit details to CEA for the visit. The same is awaited.

9.0 Additional UMPP in Andhra Pradesh & Jharkhand:

Govt. of Andhra Pradesh have *vide* letter dated 11.03.2010 recommended 3rd UMPP in Andhra Pradesh at Kakinada. Govt. of Jharkhand *vide* letter dated 15.04.2010 has recommended second UMPP in Jharkhand in Deoghar District. CEA has requested the State Governments to furnish the details of the site(s) proposed for these UMPP which are awaited.

[Ministry of Power, OM No.18/3/2010/Budget dated 5.8.2010]

Recommendation (Sl. No. 8, Para No. 2.8)

The Committee note that to achieve the targets of rural electrification in the year 2009-10, Rs. 7000 crore was allocated to the scheme at the BE stage. However, it was reduced to Rs. 5000 crore. The physical target of electrification of 17500 villages and 47 lakh BPL households could also not be achieved. As on 15.2.2010 only 13475 villages and 40.76 lakh BPL connections could be realized. The Committee are concerned to find that out of the Rs. 42000 crore subsidy sought for continuing the RGGVY scheme in the 11th Plan only an outlay of Rs. 28000 crore was allocated. The Ministry have also requested the Planning Commission and the Ministry of Finance for in-principal-approval for starting the process of RGGVY Phase-II. However, the Ministry has been advised by the Planning Commission to concentrate on implementation of the existing sanctioned projects. The Committee feel that RGGVY is most important scheme funded by Gross Budgetary Support by the Ministry of Power and rural up-liftment can be achieved only if all people living in rural areas have access to electricity. The Committee, therefore, recommend that the Ministry of Power expeditiously complete all the sanctioned projects in Phase-I so that they can take up projects sanctioned in the various States under Phase-II of the scheme. The Committee also feel that lower utilization of funds leading to lower revised estimates is an indicator that targets are being achieved slowly and there are time overruns in the process. The Committee feel that greater monitoring of the projects as well as expenditure need to be taken up for effective implementation of the scheme.

Reply of the Government

Allocation was reduced from Rs. 7000 crore to Rs. 5000 crore considering the pace of expenditure during the financial year 2009-10. However, against the physical target of 17500 un-electrified villages and release of 47 lakh BPL connections, the electrification works in

18374 un-electrified villages have been completed and 47,18,468 BPL connections have been released during the year 2009-10 for the sanctioned projects under RGGVY. Thus, the physical targets have been achieved during the year 2009-10. All the sanctioned projects under RGGVY are likely to be completed by the end of XI Plan Period. The RGGVY scheme is constantly monitored by Ministry of Power and REC, the nodal agency to ensure that the physical and financial targets are achieved within the stipulated timeframe. As stated earlier, in principle approval for initiating DPR preparation of Phase-II has been declined by Ministry of Finance at this stage.

[Ministry of Power, OM No.18/3/2010/Budget dated 5.8.2010]

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

The Committee note that the Re-structured APDRP scheme is an ambitious programme of the Ministry of Power to bring down transmission and distribution losses which are about 29% at present. The target of the scheme is to bring down the T&D losses to 15% over the years which would greatly benefit the supply position of power in the country. The scheme was sanctioned on 31.7.2008 with an estimated cost of Rs. 51577 crore, however, as on date only Rs. 5130.68 crore has been approved for disbursing to States under Part A of the scheme. The amount released so far has been only Rs. 1682.72 crore. In the financial year 2010-11 projects worth Rs. 6600 crore (cumulative) for Part A and Rs. 11000 crore for Part B are proposed to be sanctioned. The Committee would like the Government to utilize the funds progressively for implementation of the scheme in the various States and also sanction projects and release funds for other states like Orissa etc. which have not been covered under the scheme. The Committee would like to informed of the work taken up in connection with establishment of base line data, fixing accountability, strengthening and up-gradation of sub-transmission and distribution network and for adoption of information technology.

Reply of the Government

"Re-structured APDRP" was launched on 31.07.2008 with focus on actual, demonstrable performance in terms of AT&C loss reduction. Projects under the programme are to be taken up in two parts. Part-A is the projects for establishment of baseline data and IT applications for energy accounting/auditing & IT based consumer service centers and Part-B is regular distribution strengthening projects. The programme size is Rs. 51,577 crore. Expected investment in Part-A (Baseline System) would be Rs. 10,000 crore and that in Part-B would be Rs. 40,000 crore.

To facilitate the State utilities for expediting the implementation of R-APDRP, Ministry finalized the model DPRs, empanelled the IT Consultants, IT Implementing Agencies, SCADA/DMS Consultants and SCADA/DMS Implementing Agencies, finalized the model Request of Proposal (RfP) for appointment of above consultants and agencies.

In the financial year 2009-10, projects worth Rs. 6,242.26 crore were sanctioned against the target of projects worth Rs. 4000 crore. Rs. 1331.46 crore released for disbursement to state power utilities against the budget allocation of Rs. 1364 crore.

Under Part-A of R-APDRP, cumulatively 1387 projects at the cost of Rs. 5130.70 crore have been approved to 27 States/UTs (Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, J&K, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Puducherry, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttrakhand, Uttar Pradesh and West Bengal).

Under Part-B of R-APDRP, 239 projects worth Rs. 3059.28 cr. have been approved to seven States (Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Punjab, Rajasthan and Tamil Nadu).

Orissa, having private distribution companies, is not covered under the R-APDRP scheme. Participation of the private utilities in R-APDRP will be considered after a period of two years from the date of sanction of the Re-structured APDRP *i.e.* after 31.7.2010.

[Ministry of Power, OM No.18/3/2010/Budget dated 5.8.2010]

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

The Committee note that the Central Power Research Institute (CPRI) was provided a budget allocation of Rs. 55.00 crore for the year 2009-10. However, it was revised to Rs. 41.50 crore. The budget estimate for 2010-11 has been fixed at Rs. 78.18 crore. The Committee are, however, concerned at slow pace of expenditure by the institute. The Committee hope that the funds sanctioned for year 2010-11 which is almost two times of the expenditure of 2009-10 will be gainfully utilized by the institute.

Reply of the Government

The budget allocation for Central Power Research Institute (CPRI) for the year 2010-11 is Rs. 78.18 crore. The following projects are under implementation by CPRI:

- 1. Modernisation of short circuit test facilities and Augmentation of power transformer test facilities.
- 2. Modernisation and augmentation of switchgear test facilities at CPRI, Bangalore.
- 3. Centre for Advanced Energy Research in the Area Energy Efficiency & Energy Audit.
- 4. Establishment of mobile diagnostic facility for power plant specific equipment for improving performance.
- 5. Augmentation of test facilities for optimization of 800kV AC/DC transmission system.
- 6. Setting up of PQ test facility for 400 KV XLPE cable system.
- 7. Centre of Excellence of life cycle management & condition assessment of HV substation and power plant equipment.
- 8. Centre of excellence for dielectric studies.
- 9. Mechanical Strength test facility.
- 10. Quality Accreditation for new facilities & Business Development for CPRI.
- 11. Centre for Creep & Mechanical Testing and Augmentation of Wake simulation lab.
- 12. Plan R&D funding.
- 13. Research Scheme on Power.
- 14. National Perspective Plan for R&D.
- 15. Collaborative research on Emerging Technologies.

Out of the above, the projects at Sl.No. 3, 4, 5 & 9 are expected to be completed by CPRI during the year 2010-11.

Further in respect of projects at Sl.No. 1 & 2, the civil works, procurement of special nature of equipments and associated accessories need to be completed by CPRI during the year.

Apart from this, a provision has been made in the budget allocation of CPRI for participation by CPRI in the equity of the Joint Venture Company *viz.* National High Power Test Laboratory (NHPTL), which has been set up for providing online test facility for large power transformers.

[Ministry of Power, OM No.18/3/2010/Budget, dated 5.8.2010]

Recommendation (Sl. No. 11, Para No. 2.11)

The Committee learn that key areas of research have been identified by the Government which include aspects of thermal generation, super critical and ultra super critical technologies etc. In the hydro sector attention needs to be paid to silt erosion damages which are typical for Indian conditions. R&D for mini, small and pumped hydro power generation also needs to be developed as a thrust area. In the transmission sector, development of planned regional grid and ultimately sustainable National Grid is the requirement. Instances of grid failure during fog conditions, voltage instability power swings needs to be controlled. High voltage distribution system is an effective method for reduction of technical losses and improved voltage profile. Energy storage technologies need to be developed to store the additional energy generated. The Committee hope that the Government will take up projects of R&D in the energy sector for developing cleaner technologies so that the environmental impact of power projects is reduced. The Committee have also learnt that NTPC has formed Energy Technology Research Alliance (NETRA) to focus on specific areas of climate change, New and Renewable Energy, efficiency improvement and scientific support to utilities. The Committee would like to be informed of the 21 projects taken up by NETRA under networking with IITs, BARC and CSIR labs.

Reply of the Government

The Government is aware of the issues relating to silt erosion damages which are typical for Indian conditions. In fact, technologies are being developed to reduce the impact of such damages to minimal by protecting the runner plates through a system of hard metal coating. Such technology reduces the severity of corrosion of the plates. The Government is also developing R&D works to promote mini, small and pumped hydro power generation. Some of the pumped projects have already come up and few more are in pipe lines depending upon the availability of surplus energy. POWERGRID has a mandate to establish Regional and National Power Grid to facilitate transfer of power within and across the regions with reliability and security. In this direction, POWERGRID has already developed robust transmission network across length and breadth of the country which includes about 77,000 ckm. of transmission line, 131 no. of EHV AC and HVDC sub-stations with about 89,000 MVA transformation capacities and inter-regional capacity of 20,800 MW. In its continuous endeavour towards strengthening of regional as well as National grid, Inter Regional capacity is proposed to be enhanced to about 32,000 MW by the end of 11th Plan period. In addition, transmission system associated with various Central Sector/UMPP generation projects like Sasan (4000 MW), Mundra (4000 MW), Tilaiya UMPP (4000 MW), Vindhyachal–IV (1000 MW), Rihand–III (1000 MW), DVC (4700 MW) are also under implementation.

Further, several high capacity power transmission corridors comprising 765 kV EHV AC as well as 800 kV HVDC system have been identified as a part of transmission system for various Independent Power Producer (IPP) generation projects for Long Term Open Access (LTOA). These IPP projects are mainly concentrated in small pockets in areas like pit-head in Orissa, Chhattisgarh, Jharkhand or coastal sites in Andhra Pradesh, Tamil Nadu or hydel sites in Sikkim etc. To transfer power from such geographically dispersed location to the distant load centres mainly in Western/Northern Regions, high capacity power transmission infrastructure has been planned. It is estimated that above transmission corridors shall not only strengthen various regional grids but also enhance inter-regional capacity of National Grid to about 75,000 MW in the 12th Plan period.

To overcome the instances of grid failure during heavy foggy weather conditions due to accumulation of pollution on the surface of insulator discs in and around NCR, POWERGRID has taken measures to replace the conventional disc insulators with polymer insulators in polluted stretches of transmission lines in and around NCR in a phased manner. Replacement of insulators started in December 2008 is accomplished in most of the pollution affected stretches of critical transmission lines.

CERC has issued Indian Electricity Grid Code (IEGC) which are being followed by all the participants of the grid to maintain grid security and reliability.

S.No.	Project	Networking Partner	Current Status 4		
1	2	3			
1.	Development of Two Phase CFD Model of Coal Fired Boiler with Reaction and Radiation	NCL Pune	a. Boiler CFD base Model completed validation under progressb. Basic Phenomenological model completed		
2.	Development of Robotic crawler for water wall inspection	BARC Mumbai	Magnetic crawler with EMAT sensor testing completed		
3.	Multi-composition Ammonia Liquor Absorption Engine : (MALAE)	UICT Mumbai	Setup of 5 KW test loop completed, commissioning in progress		
4.	Modeling and Design of Cooling Towers and their Components for Optimum Approach Temperature	UICT Mumbai	Software for performance evaluation of NDCT developed		
5.	Development of Artificial Intelligence based modelling and optimization system for SG-TG cycle	NCL Pune	Project work completed, testing, validation and software packaging in progress		
6.	Development of SO3 Reactor and associated components for SO3-FGC	NCL Pune	Development of SO3 reactor and associated components for SO3-FGC completed		
7.	Right to use Certificate of Ammonia based FGC Technology/Patent 'Engineering Document'	HWB Mumbai	Right to use certificate provided by HWB, for use of a FGC technology by NTPC		
8.	Development of Ammonia to Urea reactor and associated components for FGC	IIT Kharagpur	Autoclave procured and set up. Experimentation of urea hydrolysis for various pressure and temperature regimes. Process flow diagram for urea to ammonia developed		

As far as NTPC is concerned, status of NETRA Projects under Networking is given below:

1	2	3	4			
9.	Development of adsorption based IIT Mumbai process for recovery of CO_2 from power plant fuel gases		Simulation of multi- component, multi- adsorbent, multi-bed PSA systems, analysis of lab-scale PSA data and experiments optimization completed			
10.	Development of Pressure Swing Adsorption Technology for CO_2 capture	IIP Dehradun	Setting up 3 bed continuous Pressure swing adsorption (PSA) test system completed with two potential adsorbent			
11.	Development of adsorbent for recovery of CO_2 from power plant flue gas	CSMCRI Bhavnagar	Development of two potential adsorbent for selective adsorption of CO_2 completed			
12.	Development of novel functionalized materials for CO_2 capture	NEERI Nagpur	Development of surfactant and amine treated functionalized zeolites and mesoporous material completed			
13.	Anoxic conversion of CO_{2} to methane	ARI Pune	Development of consortia for CO_2 to methane and selection of methagenic cultures. Establishment of 1 litre bioreactor completed			
14.	CO ₂ Separation using Membrane Contactors based on ionic Liquids	NCL Pune	Proof of Concept project for separation of CO_2 from flue gas using ionic liquid impregnated membrane.			
15.	Demonstration of Extraction of moisture from fuel gases at Dadri	IIT Delhi	Modelling and Simulation is completed Demonstration pilot plant is being set up at Dadri			
16.	Expert System for Transformer winding life assessment	Jadavpur University	Development of measuring system is in progress			
17.	Real time creep life monitoring of high pressure piping	BARC, Mumbai	System is installed at Dadri			

1	2	3	4
18.	Development of nano coating material for HV insulators	IIT, Roorkee	Hydrophobic coating material for insulators is under development
19.	Feasibility studies on Methane generation from water	IIT, Delhi	Feasibility studies have been completed. Treatment technology for Badarpur water is being identified
20.	Online blade failure detection	BARC, Mumbai	System developed and installed at Auraiya. Data is being received and analyzed at NETRA
21.	Lump formation in fly ash	IIT, Mumbai	Analysis of reasons of lump formation in fly ash exported to Middle east completed. Export resumed based on analysis

The work related to preparation of case study for cascade development of Hydro Projects in Ganga valley is proposed to be taken up by THDCIL as R&D work.

[Ministry of Power, OM No.18/3/2010/Budget, dated 5.8.2010]

CHAPTER III

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

-NIL-

CHAPTER IV

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

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

The Committee note that the Planning Commission had fixed a capacity addition target of power generation at 78,700 MW for the 11th Plan period (2007-12). According to the assessment made by the Central Electricity Authority (CEA) at the time of Mid-Term Appraisal of the 11th Plan, 62,374 MW of capacity addition is likely to be commissioned with a high level of certainty during the 11th Plan period. Going by the achievements made so far, the Committee are not fully convinced about the Government's claims of achieving even the reduced target of 62,374 MW as the term 'high level of certainty' itself exposes the very fact that Government itself is not very sure for achieving the set targets. Out of 62,374 MW a capacity addition of only 20,352 MW which is merely 32.62% of the target has been achieved till 11.02.2010 i.e. during the first three years of the Plan period. The main problems brought out before the Committee for this abysmal performance has been the delay in placement of ordersmainly civil works and Balance of Plants (BoP), delay in supply of material for main plant, shortage of fuel, problems of land acquisition and contractual dispute between project developer and contractor and their sub-vendors etc. The Ministry of Power have stated that they have taken steps to overcome the problems. The Ministry have also constituted an advisory group under Chairmanship of Minister of Power with retired Power Secretaries as Members to suggest ways and means to achieve the capacity addition target. Similarly a Group has been constituted under Secretary (Heavy Industry) to finalize an action plan which would lay down the schedule/time frame for completion of projects as per targets. This Group Under Secretary (Heavy Industry) also includes the Secretary (Power), Chairperson (CEA), CMDs of NTPC and BHEL. Also the Committee have been informed that meetings are held periodically with concerned Ministries viz the Ministry of Coal, the Ministry of Petroleum and Natural Gas and the Ministry of Environment and Forest. The Committee would like to be informed of the action Plan suggested by the above advisory

groups and implementation thereof to achieve the capacity addition targets for the 11th Plan. The Committee are of the strong view that prospective planning has not been done and executed properly in the case of the 11th Plan period by the Ministry of Power because the factors stated for delay in capacity addition could not have cropped up suddenly. The Committee therefore, strongly recommend that to achieve the revised target of capacity addition during the remaining period of the 11th Plan a thoughtful time bound, coordinated and accountable action plan taking into account all the contingencies experienced hitherto in execution of the Plan should be chalked out. The implementation of such programme should be closely monitored on monthly basis for target achievement.

Reply of the Government

The Planning Commission has fixed a capacity addition target of 78,700 MW during the 11th Plan period. Based on the inputs provided by the project developers and suppliers, CEA has assessed that a total capacity addition of 62,374 MW is likely to be commissioned with a high level of certainty during the 11th Plan period. A capacity of 23,352 MW has already been commissioned till 31.05.2010 and a capacity aggregating to 39,022 MW is likely to be commissioned with a high level of certainty during the balance period of the 11th Plan. In addition, projects totalling to 12,590 MW are being attempted for commissioning on best efforts basis during the 11th Plan period.

The following steps have been taken by the Government to achieve the capacity addition target during the Eleventh Five Year Plan and to make the country self sufficient in power:—

- (i) Monitoring mechanism in the Ministry has been strengthened. The progress of generation projects for completion during 11th Five Year Plan is reviewed periodically by the Central Electricity Authority, Ministry of Power and Power Projects Monitoring Panel (PPMP). An Advisory Group under the chairmanship of Hon'ble Minister of Power with retired power secretaries amongst others has been set up to suggest ways and means to achieve the 11th Plan capacity addition targets. Weekly review meetings are also being taken by Secretary (Power) to monitor the capacity addition programme.
- (ii) Bharat Heavy Electricals Limited (BHEL) is a major indigenous manufacturer for main plant equipment in Public Sector. BHEL has enhanced its capacity to deliver

15,000 MW of main plant equipment per annum and may raise this capacity up to 20,000 MW by March, 2012 depending upon the market demand.

- (iii) The issue of supply of equipments by BHEL has been discussed in the Committee of Secretaries chaired by the Cabinet Secretary on December 8, 2009. In pursuance of the decision taken in the meeting, a Group under the Chairmanship of Secretary (Heavy Industry) to finalize a joint action plan which would lay down the schedule/ timeframe for completion of projects as per targets has been set up. Members of the Group include Secretary (Power), Chairperson, CEA, CMD, NTPC and CMD, BHEL.
- (iv) A Joint Venture Agreement has been signed between NTPC Ltd. and BHEL to take up work related to Engineering, Procurement and Construction (EPC) for power plants and other infrastructure projects. BHEL have entered into collaboration with Alstom for supercritical boilers and Siemens for supercritical turbine-generators.
- (v) Joint Ventures have been formed between M/s L&T & MHI, Japan; Alstom & Bharat Forge; Toshiba & JSW; and Ansaldo & GB Engineering for manufacture of supercritical boilers and turbine generators in India. In addition, JV agreement has been signed between Thermal Babcock and Wilcox for manufacture of boilers.
- (vi) All stakeholders have been sensitized towards enlarging the vendor base so as to meet the Balance of Plants (BoP) requirements.
- (vii) Bulk ordering of 11 units of 660 MW each with supercritical technology with mandatory phased indigenous manufacturing Programme initiated to promote indigenous manufacturing.
- (viii) To overcome the shortage of skilled manpower, 'Adopt an ITI' initiative has been taken up.
 - (ix) Periodical meetings are held with concerned Ministries *viz.* Ministry of Coal, Ministry of Petroleum and Natural Gas and Ministry of Environment and Forests and at other forums at highest level to sort out the inter-ministerial issues with regard to availability of fuel and grant of Environment and Forest clearance to generation projects.

In addition to this, to ensure that the capacity addition targets are realized and projects are commissioned as per schedule, an Accountability System has been put in place for the Eleventh Plan central sector power projects scheduled for commissioning during the Eleventh Five Year Plan period.

[Ministry of Power, OM No. 18/3/2010/Budget dated 5.8.2010]

Comments of the Committee

(Please see para 10 of Chapter-I of Report)

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

The Committee's examination has revealed that some of the Central Sector PSUs are lagging way behind the targets set for them in the 11th Plan period despite the fact that funds were available for the same. NHPC had originally planned to add 5322 MW through 12 hydro projects during the 11th Plan. However, during Mid-Term Appraisal of 11th Plan, the capacity addition was revised to 3272 MW. Against this, actual commissioned has been only 1030 MW in the first three years of the Plan period. Similarly, NEEPCO had proposed an outlay of Rs. 18,594.46 crore for the 11th Plan period which was revised to Rs. 6376.21 crore. The already revised 11th Plan proposals have been further reduced to Rs. 4024.11 crore due to reasons like Geological surprises, non-signing of MoA with the State Governments and non-revival of certain projects like Turial HEP etc. in the ongoing projects. The Committee also note with dismay the financial performance of DVC as the achievements upto third quarter of the third year i.e. 2009-10 of the Plan has been only Rs. 12,252.26 crore as against the estimates of Rs. 24,298.85 crore in the 11th Plan. The Committee are unable to comprehend the reasons given for nonperformance of NHPC, NEEPCO and DVC. The Committee therefore, strongly recommend that in due discharge of their assigned responsibilities, the Ministry should not only monitor the progress in the target achievements of various PSUs under their administrative control, but should also play a pro-active role by giving meaningful guidance and supplementing the efforts of PSUs wherever required in interacting with State Governments or other agencies in the pursuit of the timely execution of the schemes of the capacity addition so that avoidable bottlenecks do not hinder the progress of schemes. Needless to point out that MoUs signed between PSUs and the Ministry take care of all such factors and there should not be further excuses for non-performance.

Reply of the Government

Some of the NHPC projects which were earlier included in the targets of 11th Plan period are slipping to early part of 12th Plan due to various reasons e.g. geological surprises, contractual issues, flooding of project, etc. The status of NHPC ongoing projects were reviewed by CEA in February, 2010 alongwith project developers, Contractor(s) for Civil, Electro-mechanical & Hydro-mechanical works and it was found that NHPC projects aggregating to 2522 MW are now expected to be commissioned during 11th Plan period against a target of 5322 MW in the beginning of 11th Plan.

As far NEEPCO is concerned, a capacity addition of 600 MW at Kamang H.E. Project was envisaged at the beginning of 11th Plan, which is unlikely in the 11th Plan due to bad geology in HRT, contractual issues and flooding of the project. Regarding Tuirial Hydro Electric Project, which was held up since June 2004 due to land crop compensation issue. Revival of the Project is under consideration of the Government.

The progress of the projects is monitored against the detailed milestones which *inter-alia* include schedules for supply of critical equipment and important construction/commissioning activities. Efforts are also made to facilitate resolution of issues/constraints arising during project execution relating to Governmental & other agencies.

In addition to the regular and stringent monitoring of capacity addition programme, the Ministry also plays a key role in coordinating the activities of various agencies involved in the implementation/ completion of the projects. Based on the inputs received from CEA and Monitoring Panel Consultants who regularly visit the various project sites, major issues or the bottlenecks are taken up by the Ministry with concerned agencies for their resolution. In this connection, regular review meetings are taken up with agencies/ organization like Ministry of Railways, Ministry of Coal, Ministry of Environment and Forests, Planning Commission, various equipment manufacturers, contractors and other stakeholders. In case of the issues which involve various State Governments where the projects are located, interaction at the highest level including at the level of Honorable Minister is arranged to resolve the issues/impediments in the completion of the project. Further , an Advisory Group under the Chairmanship of Minister of Power has been set up to advice on expeditious completion of ongoing projects.

[Ministry of Power, OM No. 18/3/2010/Budget dated 5.8.2010]

Comments of the Committee

(Please see Para 10 of Chapter-I of the Report)

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

The Committee note that the Ministry of Power have in their Demands for Grants 2010-11 sought Gross Budgetary Support (GBS) of Rs. 10,630.00 crore (net receipt) with a provision of Rs. 6,201.16 crore in revenue and Rs. 4,428.84 crore in capital section. The Annual Plan Outlay of the Ministry for the year 2010-11 approved by the Planning Commission was Rs. 60,751.42 crore against a proposal of Rs. 64,551.92 crore. The reasons for lower allocation than the proposed has been attributed to the, fact that funds under the National Electricity Fund (NEF) Rs. 227.64 crore as against the proposed outlay of Rs. 5063 crore only on the ground of re-casting the scheme so as to make it applicable to loans from banking sector and other financial institutions for distribution work alongwith non-APDRP as against Transmission and Distribution in earlier proposals. The Committee were concerned at the fact that modalities of the scheme for generation of funds and disbursement as loans for the important sector of transmission and distribution have not been worked out so far. The Committee recommend that the schemes under National Electricity Fund may be finalized at the earliest so that work on this important sector can progress early.

The Ministry in their reply have stated:

"In pursuance of the announcement made in the budget (2008-09) for creation of a National Electricity Fund (NEF) for providing loan to the States for improving their distribution/transmission infrastructure, a Committee under the chairmanship of the Member (Power), Planning Commission was constituted.

Based on the recommendations of the Committee, an EFC Memo was circulated on 09.09.2009 for appraisal among the scrutinizing agencies. Based on the comments received from scrutinizing agencies, a revised EFC Memo with a total interest subsidy of Rs. 18,438 crore spread over 14 years on loan disbursement of Rs. 50,000 crore during XIth Plan was circulated on 5th April, 2010 for seeking comments of the appraising agencies on the proposal so that it can be considered by Expenditure Finance Committee. The revised scheme will cover non-APDRP areas and under this scheme interest subsidy will be provided for investment in distribution sector only. Apart from PFC & REC, it would be open to other commercial Banks also. A provision of Rs. 227.64 crore is made in BE 2010-11. The proposal is yet to be considered by Expenditure Finance Committee."

[Ministry of Power, OM No. 18/3/2010/Budget dated 5.8.2010]

Comments of the Committee

(Please see Para 13 of Chapter-I of the Report)

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

The Committee are dismayed to note that during the year 2009-10 funds to the tune of Rs. 53,126.27 crore were available with the Ministry of Power and the same were revised to Rs. 45,269.60 crore. However, the actual utilization upto 31st January, 2010 has only been Rs. 26,621.43 crore which is only 50.10% of the Budget Estimates for the year 2009-10. Admittedly the reduction in RE in respect of outlay has primarily, been due to low utilization of funds in schemes like RGGVY and R-APDRP. Going by the quarterly utilization of funds during the year 2009-10, the plan expenditure in the first quarter was 7.38% in 1st quarter, 15.94% in 2nd quarter and 21.40% in 3rd quarter. On being asked by the Committee about proposed hefty increase in allocation for the year 2010-11 despite the fact that the earlier funds could not be utilized, it has been informed that allocation has been increased for the APDRP scheme and for the National Mission for Enhanced Energy Efficiency and for grant to NHPC for major works for projects of Nimboo Bazgo, Chutak and Kishanganga. The increase under APDRP from Rs. 1364 crore to Rs. 3600 crore, from Rs. 185 crore to Rs. 781 crore for NHPC (GBS) and from Rs. 18 crore to Rs. 144 crore to energy conservation should be matched with proper planning. The pace of expenditure has also not been as per the guidelines for every quarter and at times frantic efforts are made to rush the money in the last quarter which may not be backed by the corresponding physical achievements. The Committee, therefore, recommend that there should be logical and reasonable co-relation between the funds allocation and vis-à-vis funds utilization and physical achievement of the last year with the proposed allocation for the next financial year. Simply fixing higher target which may be un-realistic result in futile exercise and non-utilization and blocking of scarce resources which could be utilized more gainfully elsewhere. This reflects the poor planning and ill-conceived management on the part of the Government. With a view, to save time, energy and gainful utilization of resources it is imperative to draw a plan which is realistic

and attainable. The Committee would like that the Ministry to take necessary action accordingly.

Reply of the Government

In this regard it may be stated that the expenditure is planned well in advance at the BE stage and the Monthly Expenditure Plan forms a part of the Detailed Demands for Grants. This is done with a view to ensure expenditure is incurred uniformly throughout the year, without having to rush expenditure in the last quarter. Basically, this acts as a guideline for all implementing Wings/Agencies to ensure uniform expenditure throughout the year. The Wings are also advised to keep pace of expenditure as per the guidelines of the Ministry of Finance.

The last year being the election year, the schedule of the pace of expenditure got disturbed. The major schemes like R-APDRP, RGGVY, are constantly monitored to ascertain the progress of these schemes and it's projects sanctioned, through their Steering Committee and Monitoring Committee respectively. Ministry of Power also monitors the projects relating to training and research through various meetings and discussions. The implementing Agencies like National Power Training Institute (NPTI) & Central Power Research Institute (CPRI) are required to submit progress reports to the Ministry of Power on a regular basis. They are monitored through the Governing Councils headed by Secretary (Power) on a regular basis. The pace of expenditure *vis-à-vis* allotment is also being monitored in Senior Officers Meeting.

[Ministry of Power, OM No. 18/3/2010/Budget dated 5.8.2010]

Comments of the Committee

(Please see Para 16 of Chapter-I of the Report)

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

The Committee are anguished to note that hydro power generation has declined during April to December, 2009 as compared to the same period last year by about 7% *i.e.* to 85471 MU from 92365 MU. The main reason attributed by the Ministry for the negative growth is insufficient rainfall in the catchments areas of reservoirs during monsoon. Although, the reason of insufficient rain seems to be reasonable one however, it does not absolve the Government for poor planning without taking into consideration the contingencies involved therein. The Ministry of Power have stated that hydro power generation in the country is proposed to be stepped up mainly through new hydro capacity addition. During the 11th Plan, a total of 15,627 MW hydro capacity is envisaged to be added, out of which capacity aggregating 3,341 MW has been commissioned and remaining 12,196 MW is under construction. The performance in this regard is far from satisfactory as only about 22% of 11th Plan target has been achieved in the first three years. The remaining target of 12,196 MW in the two years seems highly unlikely to materialize. Despite this performance, the proposed 20334 MW comprising 87 projects in the 12th Plan is highly unrealistic. The Committee have been informed that various steps have been taken to increase hydro generation in the country which include creation of Hydro Power Corporations in the Central Sector and Joint Sector (Central and State), three stage clearance procedure for power projects etc. The Committee also observe that private participation in hydro generation has been encouraged considerably, presumably on the ground of financial constrains as 129 hydro projects aggregating a capacity of 36123 MW have been allotted or identified for implementation in private sector this includes 103 projects aggregating capacity of 31834 MW in the North-East Region. The Committee strongly recommend that hydro potential of the country should be identified and exploited expeditiously. The participation of private sector though essential for achievement of targets, yet the necessary safeguards like timely completion of projects, cost of power, benefit to end-user should be made the guiding factors. The private sector should be made accountable for any lapses, professional misconduct and deviation from agreement.

Reply of the Government

11th Plan Hydro Capacity Addition

During the 11th plan period, a total of 15627 MW hydro capacity was envisaged to be added. As on 31.5.2010, 3481 MW (22%) hydro capacity has been commissioned and the remaining 12146 MW is under various stages of construction. Out of which, 4634 MW is expected to be commissioned with high degree of confidence & 2070 MW is expected to be commissioned with best efforts. Projects totalling 5442 MW are at various stages of construction and expected to be commissioned in the early stages of 12th Plan.

12th Plan Hydro Capacity Addition

The status of proposed candidate 87 hydro projects of 20334 MW for benefits during 12th Plan is given below. These projects are

regularly monitored in order to finalize a realistic figure of hydro capacity addition during 12th Plan.

S. No	Particulars	Central Sector		State Sector		Private Sector		Benefit in 12th Plan (MW)	
		No.	MW	No.	MW	No.	MW	No.	MW
1.	Under Construction	2	440	3	555	7	1045	12	2040
2.	Concurred by CEA/ Approved by State Govt.	9	3106	7	1211	11	3823	27	8140
3.	DPR Prepared								
(a)	DPR under examination in CEA	3	2020	3	620	6	1010	12	3650
(b)	DPR under examination in State Govt.	1	56	2	133	1	60	4	249
(c)	DPR under revision	3	1372	7	1670	3	956	13	3998
	Sub-total(3)	7	3448	12	2423	10	2026	29	7897
4.	DPR yet to be made	1	40	9	1350	9	867	19	2257
	Total(1-4)	19	7034 (35%)	31	5539 (27%)	37	7761 (38%)	87	20334 (100%)

Status of Hydro Development for Benefits during 12th Plan—Sector-Wise

NE region (including Sikkim) accounts for more than 60% of the overall hydro electric potential identified in the country. Almost 80% of the schemes allotted to Private Sector for implementation during 12th Plan and beyond lie in this region. Steps are being taken in order to expedite growth of hydro power development in the region so that the potential is harnessed in a most optimum and time-bound manner.

An Inter-Ministerial Group (IMG) was constituted by Ministry of Water Resources (MoWR) on the directions of Prime Minister's Office (PMO) on 7th August, 2009 to evolve a suitable framework to Guide and Accelerate the development of Hydropower in the North East Region (NER). Further, for speedy hydro potential development a **"Task Force on Hydro Project Development**" has been constituted in September, 2007 under the Chairmanship of Hon'ble Minister of Power to look into all issues relating to development of hydro power including issues of rehabilitation and resettlement of project affected persons. The second meeting of the Task Force was held on 13.4.2010.

The Government encouraged the participation of private sector to tap up the hydro potential in the country for capacity addition. Further, the State Governments are to ensure that project developers submit the DPRs within the set time frame. The progress of S&I works, preparation of DPRs, concurrence by CEA and implementation of the projects will be monitored by CEA periodically against the set intermediate timelines. The Government at the same time also keeps a close monitoring of the projects under private sector in order to avoid any deviation from agreement and to make them responsible and accountable. While awarding the Techno Economic Clearance (TEC), various aspects of the projects like design, financial viability etc. are looked into. The progress of the projects is regularly monitored by the Government.

[Ministry of Power, OM No. 18/3/2010/Budget dated 5.8.2010]

Comments of the Committee

(Please see Para 19 of Chapter-I of the Report)

Recommendation (Sl. No. 12, Para No. 2.12)

The Committee find that the Bureau of Energy Efficiency were allocated an amount of Rs. 82 crore during 2009-10 and these were revised to Rs. 57.84 crore. This has been attributed to the reasons that under some schemes the price bids were lower than that anticipated earlier and also in Bachat Lamp Yojana, the need for monitoring has been obviated and hence the saving. The Committee find that saving as a result of energy conservation methods during 2007-08 and 2008-09 was 2127 MW. The target for 2009-10 has been kept at 2600 MW. However, the achievement upto 30.9.2009 was only 1348 MW. The Ministry have stated ambitious figures for achievement of savings during the 11th Plan. These include Bachat Lamp Yojana–4000 MW, standards and labeling scheme–3000 MW etc., existing buildings–600 Government Buildings, small and medium industries–500 MW. The Committee recommend that more steps need to be taken by the Government to achieve the above targets envisaged for the 11th Plan period. The Committee hope that the Government will look into various aspects of building code to make it mandatory to look into energy conservation while designing buildings both in the Government and other sectors.

Reply of the Government

In order to enhance the efforts to promote energy efficiency during the XI plan period and to achieve the target of reducing consumption by 5% (equivalent to 10,000 MW of avoided capacity) by 2012, BEE has initiated several programmes/schemes targeting the following areas:

- House hold lighting
- Commercial Buildings
- Standards & Labeling of appliances
- Demand Side Management in Agriculture/Municipalities
- SMEs and Large Industries
- Capacity Building of SDAs

A brief over view of the various schemes along with the targeted avoided capacity is indicated below:

Sl. No	Name of Scheme	Target (avoided capacity)	Achieved Upto 2008-09	Achieved during 2009-10 (under verification through 3rd party)
1	2	3	4	5
01.	Bachat Lamp Yojna to promote energy efficient and high quality CFLs in the household sector.	4,000 MW	NIL	104
02.	Standards & Labeling Programme to develop standards for energy efficiency of end-use equipments and provide informative labels.	3,000 MW	859.44	1550

1	2	3	4	5
03.	Energy Conservation Building Code sets minimum energy performance standards for new commercial buildings with a connected load of 500 KW. Energy Efficiency is also promoted in existing buildings through retrofitting.	500 MW	6.1	NIL
04.	Agriculture DSM & Municipal DSM targets replacement of inefficient pump- sets, street lighting etc. in the agricultural and municipal areas.	2000 MW	NIL	NIL
05.	Energy Efficiency in Small & Medium Enterprises (SMEs) to enhance energy efficiency in 25 energy intensive clusters.	500 MW	475	405
06.	Capacity Building of State Designated Agencies (SDAs) seeks to enhance their institutional capacities to facilitate them in the implementation of Energy Conservation Act in the respective States.	_	787.43	550
07.	State Energy Conservation Fund to ensure sustainability of energy efficiency implementation at the State level.	_	_	NIL
	Total	10000 MW	2127.97 MW (2609 MW Provisiona

The schemes are implemented within the framework of the Energy Conservation Act, 2001. The initiatives taken have resulted in an avoided capacity generation of 2127 MW during the last two years (2007-08 & 2008-09). The fuel savings are nearly 1% of the total fuel use in the country.

Energy Conservation Building Code (ECBC) was launched in May 2007 by the Government with the objective of introducing energy conservation interventions at the design stage within new commercial buildings having connected load of 500 KW and above, coming up in five climatic zones of the country.

This code was invoked on a voluntary basis so as to allow sufficient time for the commercial building sector to transform towards adoption of energy efficient designs and technologies and to ensure sufficient capacity building of related professionals like builders, architects and engineers.

Institutional framework with regard to compliance processes and integration of ECBC into building bye-law at the Municipality level are essential before the code is made mandatory. BEE is in the process of developing compliance framework and guidelines for incorporating ECBC into bye-laws.

[Ministry of Power, OM No. 18/3/2010/Budget dated 5.8.2010]

Comments of the Committee

(Please see Para 22 of Chapter-I of the Report)

CHAPTER V

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

-NIL-

New Delhi; <u>1 December, 2010</u> <u>10 Agrahayana, 1932 (Saka)</u> MULAYAM SINGH YADAV, Chairman, Standing Committee on Energy.

APPENDIX I

STANDING COMMITTEE ON ENERGY

MINUTES OF THE FOURTH SITTING OF THE STANDING COMMITTEE ON ENERGY (2010-11) HELD ON 25TH NOVEMBER, 2010 IN COMMITTEE ROOM 'A' PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee sat from 1500 hrs. to 1620 hrs.

PRESENT

Shri Mulayam Singh Yadav-Chairman

MEMBERS

Lok Sabha

- 2. Shri P.C. Chacko
- 3. Shri Shripad Yesso Naik
- 4. Shri Jagdambika Pal
- 5. Shri Ravindra Kumar Pandey
- 6. Shri M.B. Rajesh
- 7. Dr. Kavuru Sambasiva Rao
- 8. Shri Ganesh Singh
- 9. Shri Vijay Inder Singla

Rajya Sabha

- 10. Shri Govindrao Adik
- 11. Shri Rama Chandra Khuntia
- 12. Shri Bhagat Singh Koshyari
- 13. Shri Motilal Vora
- 14. Shri Veer Pal Singh Yadav

SECRETARIAT

- 1. Shri Brahm Dutt Joint Secretary
- 2. Shri N.K. Pandey Additional Director
- 3. Shri Rajesh Ranjan Kumar Deputy Secretary

REPRESENTATIVES OF THE MINISTRY OF POWER

Ministry of Power

	***	***	***
	***	***	***
	***	***	***
2.	***	***	***
3.	***	***	***
4.	***	***	***

5. The Committee then took up for consideration the draft 12th and 13th Reports on the Action Taken by the Government on the recommendations contained in the 5th and 6th Reports on the Demands for Grants of the Ministry of Power and Ministry of New and Renewable Energy respectively for the year 2010-11. The Committee adopted the same and authorized the Chairman to present the Reports to both the House of Parliament.

The Committee then adjourned.

APPENDIX II (*Vide* Introduction of Report)

ANALYSIS OF ACTION TAKEN BY THE GOVERNMENT ON THE OBSERVATIONS/RECOMMENDATIONS CONTAINED IN THE FIFTH REPORT (15TH LOK SABHA) OF THE STANDING COMMITTEE ON ENERGY

(i)	Total number of Recommendations	12
(ii)	Observations/Recommendations which have been accepted by the Government:	
	Sl. Nos. 5, 7, 8, 9, 10 and 11	
	Total:	6
	Percentage	50%
(iii)	Observations/Recommendations which the Committee do not desire to pursue in view of the Government's replies:	
	Nil	
	Total:	0
	Percentage	0%
(iv)	Observations/Recommendations in respect of which the replies of the Government have not been accepted by the Committee and which require reiteration:	
	Sl. Nos. 1, 2, 3, 4, 6 and 12	
	Total:	06
	Percentage	50%
(v)	Observations/Recommendations in respect of which final replies of the Government are still awaited:	
	Nil	
	Total:	0
	Percentage	0%
		47