

10

STANDING COMMITTEE ON ENERGY

(2015-16)

SIXTEENTH LOK SABHA

MINISTRY OF NEW AND RENEWABLE ENERGY

**[Action Taken on the recommendations contained in the
Second Report (16th Lok Sabha) on Demands for Grants of
the Ministry of New and Renewable Energy for the year
2014-15**

TENTH REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 2015/Agrahayana, 1937 (Saka)

**STANDING COMMITTEE ON ENERGY
(2015-16)**

(SIXTEENTH LOK SABHA)

MINISTRY OF NEW AND RENEWABLE ENERGY

**[Action Taken on the recommendations contained in the Second
Report (16th Lok Sabha) on Demands for Grants of the
Ministry of New and Renewable Energy for the year 2014-5]**

Presented to Lok Sabha on 09.12.2015

Laid in Rajya Sabha on 09.12.2015



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 2015/Agrahayana, 1937 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE ON ENERGY
(2015-16)

LOK SABHA

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3. Shri M. Chandrakasi
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16. Shrimati Krishna Raj
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RAJYA SABHA

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24. Shri Ram Jethmalani
25. Shri Javed Ali Khan
26. Shri Pyarimohan Mohapatra
27. Shri S.Muthukaruppan

(ii)

28. Dr. K.P. Ramalingam
29. Shri Ananda Bhaskar Rapolu
30. Dr. Anil Kumar Sahani
31. Shrimati Viplove Thakur

SECRETARIAT

- | | | |
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| 1 | Shri K.Vijaykrishnan | Additional Secretary |
| 2. | Shri N.K.Pandey | Director |
| 3. | Smt. L.Nemjalhing Haokip | Under Secretary |

INTRODUCTION

I, the Chairperson, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this 10th Report on the action taken by the Government on the recommendations contained in 2nd Report of the Standing Committee on Energy on Demands for Grant (2014-15) of the Ministry of New and Renewable Energy.

2. The 2nd Report was presented to the Lok Sabha on 22nd December, 2014 and was laid in Rajya Sabha on the same day. Replies of the Government to all the recommendations contained in the Report were received on 21st August, 2015.

3. The Report was considered and adopted by the Committee at their sitting held on 3rd December, 2015.

4. An Analysis on the Action Taken by the Government on the recommendations contained in the 2nd 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
December, 2015
Agrahayana, 1937 (Saka)

Dr. Kirit Somaiya,
Chairperson,
Standing Committee on Energy

CHAPTER – I

This Report of the Standing Committee on Energy deals with the action taken by the Government on the Recommendations/Observations contained in their Second Report (Sixteenth Lok Sabha) on the Demands for Grants of the Ministry of New and Renewable Energy for the year 2014-2015

2. The Second Report was presented to Lok Sabha on 22nd December, 2014 and was laid on the Table of Rajya Sabha on the same day. The Report contained 10 Recommendations/Observations.

3. Action Taken Notes in respect of all the Recommendations/Observations contained in the Report have been received from the Government. These have been categorized as follows:

- | | | |
|-------|---|---------------------------|
| (i) | Recommendations/Observations which have been accepted by the Government: | |
| | Serial Nos. 1,2,4,5,6,7,9 and 10 | Total -08 Chapter-II |
| (ii) | Recommendation/Observation which the Committee do not desire to pursue in view of the Government's replies: | |
| | Nil | Total - 00 Chapter-III |
| (iii) | Recommendations/Observations in respect of which the replies of the Government have not been accepted by the Committee and which require reiteration: | |
| | Serial Nos.3 and 8 | Total-02 Chapter-IV |
| (iv) | Recommendation/Observation in respect of which the final replies of the Government are still awaited: | |
| | Nil | Total - 00 Chapter-V |

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

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

A. 12th Five Year Plan

(Recommendation Sl.No. 1)

6. The Committee had noted that against the financial requirement of Rs.40,000 crore projected in the 12th Plan, an amount of Rs.19,113 crore was allocated to meet a capacity addition target of 29800 MW during the 12th Five Year Plan. The Committee had also noted that against the total allocation, the allocation for the first three years had been Rs.5407, leaving Rs.13706 to be utilized for the last two years of the Plan period. In view of the already reduced financial allocation, the Committee had recommended the Ministry to revisit the physical and financial targets under various heads and evolve simple strategy with a view to see that the allocated funds for the 12th Plan period for the renewable energy sector gets sufficient thrust.

7. The Ministry of New and Renewable Energy in their Action Taken Reply has stated as under:

" The physical target for grid interactive renewable power for 12th Five Year Plan was 30,000 MW (10,000 MW for solar, 15,000 MW for and 5000 MW for other renewable energy sources). Besides the target for distributed renewable sources systems was set for 3400 MW equivalent. It is pertinent to note that Union Government in its Budget Announcements for 2015-16 revised the target of grid interactive renewable energy power capacity to 175,000 MW by 2022 comprising 100,000 MW Solar, 60,000 MW Wind, 10,000 MW Biomass and 5000 MW Small Hydro Power. Achieving the target would undoubtedly require easing financing and providing it for longer tenures at lower interest rates, favorable and consistent policy initiatives, adequate unlocking of land resources for renewables as well as an expansion of the transmission capacity. The Government has launched a multi-pronged strategy focusing on all these aspects to ensure to achieve

the target prior to the dateline of 2022. The financing pattern of the schemes/programmes has also been altered accordingly whereby the focus is laid on addition of capacity under grid interactive renewable energy sources".

8. The Committee observe that besides the 12th Five Year Plan physical target of 30,000 MW grid interactive renewable power, the Union Government, in its Budget announcements for 2015-16 had revised the target of grid interactive renewable energy power capacity to 175,000 MW by 2022 comprising 100,000 MW Solar, 60,000 MW Wind, 10,000 MW Biomass and 5000 MW Small Hydro Power. The Committee welcome the ambitious target set by the Government. However, as there is no mention about the financial requirements and allocation for the enhanced physical target, the Committee are concerned about inadequate budget allocation, as it will adversely affect achievement of the targets set. **The Committee, therefore, would like to re-emphasise their recommendation to evolve the requisite strategy with a view to ensuring that the allocated funds for the 12th Plan period for the renewable energy sector are properly utilized. Besides, sufficient thrust may be provided to ensure that paucity of funds does not come in the way of revised and ambitious development plans in the renewable energy sector.**

B. Demands for Grants of MNRE for 2014-15

(Recommendation SI.No. 3)

9. The Committee had noted that against the Gross Budgetary Support sought to the tune of Rs. 5449 crore in their annual plan, an amount of

Rs.1519 crore was allocated as BE 2014-15 by Planning Commission and Ministry of Finance in the Interim Budget which was increased to Rs.2519 crore in the Regular Budget that includes Rs.1000 crore for the budget announcements essentially for solar energy programmes. The Committee had also noted that the programmes of the Ministry such as wind power and solar power have suffered a setback due to shortage of funds, thereby creating pending liabilities for future. The Committee were informed that the Ministry is formulating proposals for availing funding under the National Clean Energy Fund (NCEF) to meet the physical targets. The Committee had, therefore, recommended that the Ministry of New and Renewable Energy should pursue the matter with the Ministry of Finance and get allocation of more funds.

10. The Ministry of New and Renewable Energy in their Action Taken

Reply have stated:

"The Committee have reiterated the facts that (a) the funds allocated to the Ministry are not commensurate with the targets set for the short to medium term, (b) additional funds provided in 2014-15 were essentially for new schemes/projects announced in Budget for the year. As a result of which pending liabilities are mounted under the ongoing schemes/programmes of the Ministry. Within the available budgeted outlay, Ministry is partly meeting the past liabilities and partly used for the sanction of new projects under ongoing schemes/programme. As Ministry's ongoing schemes/programmes are increasingly funded from NCEF, Ministry is pursuing at various levels with Ministry of Finance to provide adequate funding both from NCEF and gross budgetary support for the ongoing schemes/programmes.

Besides, to achieve the enhanced targets of capacity addition under grid-interactive renewable energy, the new projects are posed for/approved for funding the Union Government's share in the form of VGF/subsidies/grants from NCEF. It is informed that till the last meeting of the Inter Ministerial Group on funding of projects from NCEF held on 30.4.2015, Ministry has been able to obtain the approval for 27892.17 crore, which is equivalent to the proportion of the total project cost to be funded from NCEF over the period of next 7-8 years. As per the IMG's recommendations, funds of the order of 5264.42 crore are to be provided from NCEF during the current

financial year (2015-16), however despite the fact that Ministry pursued with Ministry of Finance at various levels to provide the sanctioned funds in the First Batch of Supplementary Demands for Grants, Ministry of Finance recommended only Rs 500 crore during 2015-16. MNRE would continue to pursue with Ministry of Finance to provide the remaining funds in the Second Batch of Supplementary Demand for Grants to be place before the Parliament during it Winter Session in November/December, 2015".

11. The Committee were concerned about the reduced budgetary allocation made for the year 2014-15 and had recommended to pursue with the Ministry of Finance for more allocation at RE stage. In the Action Taken Reply, the Committee are happy to note that the Ministry has been able to obtain the approval for Rs.27892.17 crore, which is equivalent to the proportion of the total project cost to be funded from NCEF over the next 7 to 8 years. As per the Inter Ministerial Group's (IMG) recommendations, funds of the order of Rs.5264.42 crore are to be provided from NCEF during the current financial year (2015-16). The Committee, are however, informed that the Ministry, despite pursuing with the Ministry of Finance to provide the sanctioned funds in the First Batch of Supplementary Demands for Grants, the Ministry of Finance have recommended only Rs. 500 crore during 2015-16. The Committee appreciate the prompt action taken by the Ministry in mobilizing additional resources. However, the resource allocation is too meager to enable the achievement of the ambitious target. Despite the recommendation made by IMG for allotment of Rs.5264.42 crore for the year 2015-16, the allocation made, which is a mere Rs.500 crore, is grossly inadequate. **The Committee, therefore, will like to reiterate their recommendation that the Ministry of New and Renewable Energy**

should pursue with the Ministry of Finance to provide the remaining funds, so that the targets set for the year 2015-16 are fully achieved.

C. Remote Village Electrification Programme (RVEP)

(Recommendation SI.No. 8)

12. The Committee had noted that the scheme of RVEP is continued as Rural Village Electrification Programme Phase-II during 12th Five Year Plan with a financial outlay of Rs.1000 crore and the financial outlay for 2014-15 is Rs.14 crore with a physical target to sanction 250 new villages/hamlets. Keeping in view the significance of the programme for the remote and far flung areas and the objectives and purpose for which the programme is being extended, the Committee had recommended the Ministry to make serious efforts so that the plans are implemented and the rural people reap the intended benefits.

13. In their reply, the Ministry of New and Renewable Energy has stated as under:

"Continuation of modified Remote Village Electrification Programme (RVEP) was discussed in EFC meeting during the year 2014-15 in which decision was taken to continue the programme with no modification with limited available funds. The Ministry is making effort in clearing old liabilities, however new project will be considered after clearing the claims received for already completed projects".

14. The Committee had commended the continuation of the Remote Village Electrification Programme, as they believed that the scheme has been extended for the larger benefit of the rural population. The Committee had noted that financial outlay of Rs.14 crore has been made for the year 2014-15 with a physical target to sanction 250 new villages/hamlets. However, the Ministry, in their reply, has not provided the achievements during 2014-15, both physical and financial and has merely stated that efforts are being made for clearing old liabilities. **The Committee will like to be**

apprised of those old liabilities and whether the amount was allocated to clear old liabilities or for covering 250 new villages/hamlets and also whether those old liabilities have been cleared. Further, the Committee would like to reiterate their recommendation that the Ministry should make serious efforts, so that the plans are implemented and the rural people reap the intended benefits.

D. Research, Design, Demonstration and Development in New and Renewable Energy (RDD&D)

(Recommendation Sl. No. 10)

15. The Committee had noted that for the year 2014-15, an amount of Rs 149.50 crore was allocated, which included Rs. 95.0 crore for RDD&D, and the remaining budget is for MNRE Institutions, namely, National Institute of Solar Energy (NISE), Gurgaon, National Institute of Wind Energy, Chennai and National Institute of Renewable Energy, Kapurthala. The Committee were informed that the emphasis for the year 2014-15 was to support RD&D efforts for faster development of technology for commercialization and important areas of RD&D include solar thermal technology, solar photovoltaic technology, biogas, biofuel, hydrogen and fuel cells. It was also informed that the policy and guidelines for support of RD&D is under revision. The Committee had desired that the thrust area of research and development activities should include resource identification, resource assessment, technological development, demonstration, popularization, cost competitiveness and commercialization of new and renewable energy sources. The Committee had also urged the Ministry to focus on technological advancements and had recommended that indigenous research and development in the field of renewable energy should be given utmost priority to bring down the cost of renewable equipment substantially and improve their efficiency considerably to attract substantive investment.

16. The Ministry of New and Renewable in their reply has stated:

"The policy and guidelines for research, development and demonstration (R&RD) are in the process of revision and all important aspects of technology development and demonstration, including the ones suggested by the Committee, are being considered for inclusion in a cost effective manner. The resource assessment aspects are presently being pursued vigorously by National Institute of wind

Energy (NIWE), Chennai and the National Institute of Solar Energy (NISE), Gurgaon. NIWE, Chennai in collaboration with ISRO is also working on utilizing satellite based data for estimating Solar and Wind potential across the country. The Ministry is also considering to introduce an award system for encouraging young scientists for innovation in new and renewable energy. A brainstorming consultation meeting is being planned for discussion on achievements made and for identifying the thrust areas. R&D conclave is also proposed to be organized in the August/September, 2015 for sharing the achievements of R&D and seeking the views of researchers, experts, policy makers to take the progress further for better results".

17. The Committee are happy to note that the policy and guidelines for research, development and demonstration (RD&D) are in the process of revision and that all important aspects of technology development and demonstration, as suggested by the Committee, are being considered for inclusion in a cost effective manner. The Committee are also informed that a brainstorming consultation meeting was being planned for discussion on achievements made and for identifying the thrust areas and that R&D conclave was also proposed to be organized in the August/September, 2015 for sharing the achievements of R&D and seeking the views of researchers, experts and policy makers to take it forward for better results. **The Committee will like to be apprised of the development regarding revision of the policy and guidelines for research, development and demonstration (RD&D). The Committee may also be enlightened about the outcome of the R&D conclave which was organized in August/September, 2015. Further, while acknowledging the initiatives of the Ministry in the RD&D sector, the Committee will like to emphasise their recommendation to focus on technological**

advancements and that indigenous research and development in the field of renewable energy should be given utmost priority to bring down the cost of renewable equipment substantially and improve their efficiency considerably to attract substantive investment.

CHAPTER II

OBSERVATIONS/ RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

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

Twelfth Five Year Plan

(Recommendation No.1)

The Committee find that the budget allocation of the Ministry for the 12th Plan period is Rs.19113 crore. It is far below than the amount demanded by the Ministry for the entire plan period which was Rs. 40,000 crore. With this amount a capacity addition target of 29800 MW was fixed for the 12th Plan period. However, the budgetary allocation for the first 3 years of the plan period has been done and it is not evenly distributed. The allocation was Rs. 1150 crore (RE) for the year 2012-13, Rs. 1738 crore (RE) for the year 2013-14 as against Rs. 2519 crore (BE) for the year 2014-15. The total allocation for the first three year is Rs. 5407 leaving Rs. 13706 to be utilized for the last 2 years of the plan subject to the full utilization of the amount earmarked for the current fiscal i.e. 2014-15. The Committee were informed that the allocation has been substantially lower than the requirement projected and this would affect the overall targets of the 12th Plan. The Committee draw attention to the reduced financial allocation. The Committee would like to recommend that the Ministry revisit the physical and financial targets under various heads and evolve simple strategy with a view to see that the allocated funds for the 12th Plan period for the renewable energy sector get sufficient thrust.

Reply of the Government

The physical target for grid interactive renewable power for 12th Five Year Plan was 30,000 MW (10,000 MW for solar, 15,000 MW for and 5000 MW for other renewable energy sources). Besides the target for distributed renewable sources systems was set for 3400 MW equivalent. It is pertinent to note that Union Government in its Budget Announcements for 2015-16 revised the target of grid interactive renewable energy power capacity to 175,000 MW by 2022 comprising 100,000 MW Solar, 60,000 MW Wind, 10,000 MW Biomass and 5000 MW Small Hydro Power. Achieving the target would undoubtedly require easing financing and providing it for longer tenures at lower interest rates, favorable and consistent policy initiatives, adequate unlocking of land resources for renewables as well as an

expansion of the transmission capacity. The Government has launched a multi-pronged strategy focusing on all these aspects to ensure to achieve the target prior to the dateline of 2022. The financing pattern of the schemes/programmes has also been altered accordingly whereby the focus is laid on addition of capacity under grid interactive renewable energy sources.

[Ministry of New and Renewable Energy
File No.8/1/2014-P&C dated: 21/08 /2015]

(Recommendation No. 2)

The Committee note that in order to accelerate the pace of implementation of renewable energy programmes in the country, the Ministry are aiming towards engaging other Ministries and public sector undertaking to encourage them to take up renewable energy development projects through their budget. The Committee were informed that the Ministry of Railways have made certain budget provision for renewable energy including setting up of 75 MW wind projects and energizing 1000 level crossings with solar power. Statedly, Ministry of Railways propose to set up a Railway Energy Management Company to harness potential of solar and wind energy and seek financial support including viability gap funding from the National Clean Energy Fund operated by the Ministry of Finance. The Ministry propose to achieving the maintain its overall targets for the 12th Plan in association with other Ministries and PSUs who have interest and commitment to renewable energy. The Committee appreciate the approach of the Ministry in encouraging other Ministries and PSUs to take up renewable energy development projects. The Committee are of the considered view that there is a large scope for the involvement of Ministries viz. Defence, Home, Rural/Urban Development and PSUs of the Government. The Committee therefore, would like to emphasize about the association with the Ministry of Power in this endeavor. In order that there is better planning and effective coordination between all Ministries/Departments, the Committee recommend formation of an expert group with a view to suggest measures for launching the renewable energy development projects on a large scale.

Reply of the Government

As mentioned in reply to Recommendation No.1, the target of National Solar Mission (NSM) for grid interacted solar power has been enhanced by the Government from 20,000 MW to 1,00,000 MW to be achieved by 2022. Out of this, 40,000 MW will be achieved through Grid-connected Rooftop SPV projects and the remaining 60,000 MW through other schemes/projects viz. projects by Unemployed Youths & Farmers (10,000 MW), Public Sector Undertakings (10,000 MW), large private sector / independent power producers (5,000 MW), RECI (5,000 MW), State Schemes/ programmes

(20,000 MW) and ongoing MNRE schemes/programmes (10,000 MW). To motivate and involve the other Ministries/Departments to facilitate to achieve the revised target, MNRE has initiated number of steps/measures as detailed below:

- a) A scheme is launched for setting up of over 300 MW of Grid connected solar projects by defense establishments and para-military forces with viability gap funding.
- b) A scheme is launched for setting up of 1,000 MW of Grid connected solar projects by CPSUs and Government of India organizations with Viability Gap Funding. Under the scheme, 200 MW has been allocated to Ministry of Railways and 250 MW to NTPC to set up solar power
- c) The Ministry has also organized workshop on 7th July, 2015 for allocation of Rooftop Solar Projects of 1 MW to the Central Ministries and PSUs/ institutions/ organizations working under their control.
- d) Under the Mission Statement and Guidelines of Smart Cities of Ministry of Urban Development, a provision is made with at least 10% of the Smart City's energy requirement coming from solar energy.

MNRE is therefore already working in consultation with the concerned Ministries/Departments for launching the renewable energy projects on the large scale.

[Ministry of New and Renewable Energy
O.M. No. 8/1/2014-P&C dated: 21/08 /2015]

Solar Energy

(Recommendation No. 4)

The Committee note that India is endowed with a vast solar energy potential where the daily average solar energy incident varies from 4-7 Kilowatt hour per square meter resulting in generating nearly 30-50 MWp per square kilometer. To exploit the vast available potential of solar energy, the Jawaharlal Nehru National Solar Mission was launched in 2010 which targets include (i) deployment of (a) 20,000 MW of grid connected solar power (b) 2,000 MW of off-grid solar applications including 20 million solar lights by 2022. The Mission is being implemented in three phases. Phase-I has concluded in March, 2013 and the achievements of the target is satisfactory. The Committee find that against the phase-I target of 1100 MW capacity addition of grid connected solar power generation, a total capacity of 1684.43 MW has been commissioned and under Off-grid solar applications, against a target of 200 MWp, 252.5 MWp off-grid solar photovoltaic system equivalent capacity has been installed. On the financial front, against the budgetary provision of Rs.1808.58 crore, the actual expenditure is reported to be Rs.1754.54 crore during the first phase of the programme. The Committee

appreciate the overall Phase-I performance especially for exceeding the achievements vis-à-vis targets. Regarding Phase-II (2013-17) targets, the Committee are informed that a capacity addition of 9000 MW grid connected solar power and 800 MW capacity equivalent Off-grid solar applications has been set. Against this, as on 1st September, 2014, 2743 MW grid connected solar power and 87.77 MW Off-grid solar applications have been commissioned. The Committee note that the target period of JNNSM Phase-II is 2013-17 and the achievement so far under Phase-II is 2743 MW and 800 MW both Grid and Off-grid which are satisfactory. The Committee, therefore, recommend that all out efforts be made to achieve the target set under Phase-II of 9000 MW grid connected and 800 MW off-grid solar applications and the Committee apprised.

Reply of the Government

Some of the major schemes launched by the Ministry during 2014-15 for setting up Solar Power Plants are given below:-

1. Scheme for setting up over 300 MW of Grid-Connected & Off-grid Solar PV Power Projects by Defence Establishments under Ministry of Defence and Para Military Forces (under MHA) with Viability Gap Funding (VGF) under Phase-II/III of JNNSM during 2014-15 and onwards.
2. Scheme for Development of Solar Parks and Ultra Mega Solar Power Projects with aggregate capacity of 20,000 MW in the country during 2014-15 and onwards.
3. Scheme for setting up 1000 MW of Grid-Connected Solar PV Power Projects by Central Public Sector Undertakings (CPSUs) and Government of India organizations under various Central/State Schemes/self-use/3rd party sale/merchant sale with Viability Gap Funding (VGF) under Batch-V of Phase-II of JNNSM.
4. Pilot-cum-Demonstration Project for Development of Grid Connected Solar PV Power Plants of 100 MW on Canal Banks and Canal Tops
5. VGF Scheme for setting up of 750 MW and 2000 MW Capacity Solar Power Projects through SECI.

Brief details of some of the ongoing projects are summarized as under:-

| S.NO. | State/Organization | Capacity |
|--------------|--|-----------------|
| 1 | Grid Connected Solar PV Power Projects by NVVN (Bundling Scheme) | 3000 MW |
| 2 | Grid Connected Solar PV Power Projects by SECI (VGF Scheme) | 2000 MW |
| 3 | Grid Connected Solar PV Power Projects by | 3300 MW |

| S.NO. | State/Organization | Capacity |
|-------|---|----------------|
| | NTPC | |
| 4 | Grid Connected Solar PV Power Plants of on Canal Banks and Canal Tops | 100 MW |
| 5 | Grid Connected Solar PV Power Projects by States under State Policies | 1050 MW |
| 6 | Indo-Pak Border Solarization – Pilot Projects | 05 MW |
| | Total | 9455 MW |

The total commissioned capacity of grid connected Solar Power Projects in the country as on 31.7.2015 was over 4,101 MW. A statement showing State-wise/UT-wise commissioning status is given in Annexure-I. It is therefore the commitment of MNRE to make all possible efforts to achieve the targets set for Phase II of JNNSM.

[Ministry of New and Renewable Energy
O.M. No. 8/1/2014-P&C dated: 21/08 /2015]

(Recommendations No. 5)

The Committee note that under the JNNSM, the Ministry is pursuing several projects simultaneously with the time-frame running from 2-5 years this includes- 1000 MW Grid-connected Solar PV Power Projects by Defence Establishments under Ministry of Defence and Para Military Forces; 1000 MW Grid Connected Solar PV Power Projects by Central Public Sector Undertakings (CPSUs); Setting up of Solar Parks and Ultra Mega Solar Power Parks (25 Nos totalling 20,000 MW); 15,000 MW of Grid Connected Solar PV Projects under Bundling Mechanism with unallocated Conventional power; 90 MW Grid connected Solar PV Power Project on Canal Top/ Canal Banks; Projects allotted for 750 MW under the Grid Connected Solar PV Power Projects with Viability Gap Funding; Power Sale Agreement for 300 MW signed; 1,00,000 Solar Power Driven Agricultural pump sets under the ongoing scheme have been finalized; Grid Connected Rooftop Solar PV Systems totalling 255 MW is under implementation; proposal of a 1000 MW of Grid Connected Solar PV Power Projects with VGF pending with M/o Finance for approval by IMG for funding under NCEF; Sites identified for two Solar Thermal Power pilot projects of 50 MW each. The aggregate capacity of these proposed projects is about 30,000 MW which is more than the Mission target of 20,000 MW capacity grid connected solar power. The Committee also observe the determination of the Government to the development of solar power projects during the budget announcement. Now the Ministry has a task ahead to achieve the targets and fulfill the ambition of the Government in the development of solar power. The Committee, therefore, recommend that expansion of solar activities in the country need a revisit as not only the Government offices but other public bodies need to go in far in a big way for switching over or greater use of solar energy.

Reply of the Government

Encouraged by falling PV prices, availability of high solar potential, likelihood of reaching grid parity soon and a rapid increase in solar installation in recent months, a scale up plan has now been formulated for the next 7 years to achieve a target of 100 GW of solar installed capacity by 2021-22. It is proposed to achieve the enhanced targets of solar energy under two categories of solar projects: Rooftop Solar Projects (40,000 MW) and Large Scale Solar Projects (60,000 MW) as under:-

| (Capacity in MW) | | | |
|-------------------------|--------------------------|---|--------------------------|
| Category-I | Proposed Capacity | Category-II | Proposed Capacity |
| Rooftop Solar | 40,000 | Scheme for decentralized generation of Solar Energy projects by Unemployed Youths and Farmers | 10,000 |
| | | Public Sector Undertakings | 10,000 |
| | | Large Private Sector / Independent Power Producers (IPPs) | 5,000 |
| | | RECI | 5,000 |
| | | Under State Policies | 20,000 |
| | | Ongoing programmes including past achievements | 10,000 |
| Total | 40,000 | | 60,000 |

The year-wise capacity addition envisaged under the proposed two categories shall be as under:-

| Category | Year-wise Targets (in MW) | | | | | | | Total |
|----------------------------------|--------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | |
| Rooftop Solar | 200 | 4,800 | 5,000 | 6,000 | 7,000 | 8,000 | 9,000 | 40,000 |
| Large Scale Solar Power Projects | 1,800 | 7,200 | 10,000 | 10,000 | 10,000 | 9,500 | 8,500 | 57,000 |
| Total | 2,000 | 12,000 | 15,000 | 16,000 | 17,000 | 17,500 | 17,500 | 97,000* |

*3,743 MW commissioned upto 2014-15.

The capacity of 40,000 MW of grid-connected rooftop is proposed to come up through the institutional sector (hospitals, educational institutions,

etc.), industrial & commercial sector and the housing sector. As regards the capacity of 60,000 MW as proposed in category-II, the large Scale Grid Connected Solar Power projects can include projects in Solar Parks, small projects on spare capacity with sub stations, small stations connected to the distribution network at 33 KV and below by unemployed graduates and village panchayats, medium size projects on land outside the solar parks, Ultra Mega Solar Power Projects which require huge investment and can be developed by companies which are into the power sector business and have proven experience in developing and operating large power projects. The expected categories of developers would be (i) private sector companies with surplus funds; (ii) PSUs and (iii) international companies.

MNRE agree with the view of the Committee that the revised target of NSM of 1,00,000 MW is very ambitious and will therefore be possible to achieve only with the active cooperation from all quarters. Accordingly, MNRE is making all the efforts to involve the Ministries of Government of India, State Governments, PSUs as well as private companies.

[Ministry of New and Renewable Energy
O.M. No. 8/1/2014-P&C dated: 21/08/2015]

Wind Energy

(Recommendations No. 6)

The Committee note that wind Energy has emerged as most successful renewable energy option in India and is the fastest growing renewable energy technology for generating grid connected power amongst various renewable energy sources. The Wind power potential in the country at the height of 80 meter has been estimated to be more than 1,00,000 MW. Against this, a total capacity of 21,132 MW has been reportedly installed as on March, 2014. The Committee find the last two years' performance very poor. In 2012-13 and 2013-14, against the targets of 2500 MW each, a wind capacity addition of 1700 MW and 2079 MW has been achieved with reportedly full utilization of budget. The withdrawal of Accelerated Depreciation Benefits and Generation Based Incentive scheme have been held responsible for the low achievement of the targets during this period. The Committee were informed that the Generation Based Incentive (GBI) has been continued with increased ceiling and the Accelerated Depreciation (AD) is being reinstated. The Committee hope this would accelerate the performance of the wind energy sector during the current as well as coming years. For the year 2014-15, the Committee were informed that a physical target of 3000 MW has been set with a budgetary allocation of Rs.279. The Committee, therefore, recommend that every effort should be made to achieve the target for the current year. The Ministry should also give due publicity for the incentives available to the industry.

Reply of the Government

As per the suggestion of the Committee, efforts were made to achieve the wind targets during 2014-15. Besides making the Industry aware of the incentives offered by the Government for the wind energy sector, with the close cooperation of Ministry of Finance, the Accelerated Depreciation was reinstated with effect from July, 2014. All these efforts resulted in achieving an installation of 2312 MW capacity during 2014-15, which was 115.6% of the target of 2000MW set for the year

[Ministry of New and Renewable Energy
O.M. No. 8/1/2014-P&C dated: / / 2015]

Small Hydro Power

(Recommendations No. 7)

The Committee find that the estimated potential for power generation in the country from small hydro projects (upto 25 MW capacity) is around 20,000 from 6474 identified sites all over the country. Against this estimated potential, a cumulative capacity of 3856.678 MW capacity has been installed as on September, 2014. The Committee find the performance during 2012-13 quite dismal, i.e. against the target of 300 MW, the achievement was 236 MW and the achievement during 2013-14 is not satisfactory i.e. against the target of 300 MW, a capacity addition of only 171.42MW has been installed which is 57 percent of the target. However, the fund allocation during this period has been fully utilized. The reasons for the declining achievement during the last two years has been attributed to the natural calamity in Uttarakhand, restriction imposed by High Court on hydro projects in Uttarakhand and Karnataka, saturation of power purchase from small hydro projects in Himachal Pradesh, the tariff for power generated from SHP projects, low rate of average pool power purchase rate in Himachal Pradesh and non-sale of Renewable Energy Certificates in the open market. The Committee were apprised that the private sector is not finding the setting up of small hydro projects as an attractive business as costs of setting up projects are incrementally increasing and the tariffs are not that attractive. The Committee find a substantial reduction in the physical target for 2014-15 which is set at 250 MW capacity with a financial allocation of Rs. 113 crore. Taking note of the statement of the Ministry that the problem areas in the sector have been identified, the Committee recommend that corrective steps be taken to exploit the available potential of small hydro power. The Committee were informed that the Ministry is in the process of launching a National Mission on Small Hydro for which consultations are being held with State Governments and other stake holders. The Committee believe this new project of the Ministry would revamp the small hydro activity in the country and therefore, recommend that both the initiatives and monitoring may be strengthened in order to ensure that their efforts bear the desired results.

Reply of the Government

The Ministry has vigorously monitored the progress of Small Hydro Projects by (i) holding frequent meetings with State Governments and SHP developers, (ii) visits by MNRE officers for on the site monitoring of SHP projects and (iii) visits by the technical team of Alternate Hydro Energy Centre (AHEC), established in Indian Institute of Technology, Roorkee, to provide on the spot technical advice to SHP developers. As a result of these efforts, the installed capacity of SHP project has gone up to 251 MW during 2014-15, which exceeded the target of 250 MW set for the year. The capacity installed during 2014-15 (251 MW) was also higher than the capacities installed during 2013-14 (171 MW) and 2012-13 (236 MW). A Concept Note on National Mission on Small Hydro Power has been circulated amongst the Central Government Ministries for soliciting their views/comments. The process for obtaining the approval of the Government for setting up the proposed Mission is being initiated by MNRE.

[Ministry of New and Renewable Energy
O.M. No. 8/1/2014-P&C dated: 21/08/2015]

Renewable Energy for Urban, Industrial and Commercial Applications

(Recommendations No. 9)

The Committee note that the programmes implemented by the Ministry under Urban, Industrial and Commercial Applications include Energy Efficient Solar/Green Building Programme, Energy Recovery from Urban, Industrial and Commercial Wastes and Biomass and Cogeneration in industry. The Committee observe a drastic reduction of budget at RE stage in all the major programme of the sector. Under Green Building Solar Cities BE of Rs. 12 crore during 2012-13 and 2013-14 in each year has been reduced to Rs. 5 crore and Rs.3.10 crore respectively. Similarly, under waste to energy programme, the BE of Rs.32.05 crore in 2012-13 and Rs.33 crore in 2013-14 has been reduced to Rs.12.71 crore and Rs.10 crore respectively. The physical achievement under Green Building Solar Cities was not provided and under waste to power, in 2012-13 against a target of 40 MW only 20.23 MW capacity could be achieved which is merely 50 percent of the target. However, the physical achievement under biomass co-generation is commendable which is 88.65 MW against a target of 60 MW in 2012-13 and 60.67 MW against a target of 60 MW in 2013-14. The financial performance under biomass cogeneration is also satisfactory. For the year 2014-15, a financial allocation of Rs.27.50 crore has been allocated with a physical target of 30 MW under waste to energy and Rs.8 crore for 80 MW under biomass co-generation. It has been informed that five pilot projects on energy recovery from Municipal Solid Wastes (MSW) are on-going. The Committee were also informed that the Municipal Solid Waste to Energy programme is now being implemented by the Ministry of Urban Development. The Committee are aware that the Ministry itself is not setting up the projects but is playing the role of a catalyst and accordingly the progress of the projects

monitored. MNRE being the nodal Ministry for all matters relating to new and renewable energy, has a major role and responsibilities in the development of renewable energy in all aspects. The Committee, therefore, recommend that the Ministry should play a proactive role in coordination with the Ministry of Urban Development, State Governments, Municipal Corporations and other concerned Departments so that more projects for recovery of waste to energy are implemented. Besides, they should also strengthen their monitoring system for timely completion of the on-going projects. They also feel that the concept of Green Building, which aims to increase use of renewable energy in buildings by using solar passive design, use of eco-friendly and less energy intensive building materials, integration of renewable energy and energy efficiency, need promotions.

Reply of the Government

The Ministry is implementing the five pilot projects on Municipal solid Waste to Energy as per directions of the Hon'ble Supreme Court of which one project has already been commissioned and two projects are expected to be commissioned during 2015-16. The MNRE will be implementing the demonstration of new technologies for MSW and Urban, and Industrial waste to energy projects wherein the Central Financial Assistance of Rs.0.20 crore to 2.00 crore/MW is being provided based on the type of waste and technology deployed. The Ministry of Urban Development is also in the process of launching new scheme on Municipal Solid Waste to Energy and it is expected that the programme will get boost with the new scheme. MNRE is providing all possible technical help to Ministry of Urban Development to give a boost to programmes on waste to energy. The on-going demonstration projects are being closely monitored periodically to ensure that they are completed well within the stipulated time lines.

MNRE is implementing a programme on 'Energy Efficient Solar/Green Buildings' with an objective to promote the widespread construction of energy efficient solar/green buildings in the country through a combination of financial and promotional incentives, and other support measures so as to save a substantial amount of electricity and other fossil fuels apart from having peak load shavings in cities and towns.

Keeping in view the fact that Building Rating Systems have been quite effective in raising awareness and popularizing energy efficient and green building design. to promote renewable energy applications in buildings, solar passive design etc., Green Rating for Integrated Habitat Assessment (GRIHA), a rating system for green buildings has been developed by MNRE in association with The Energy and Resources Institute (TERI). This is being implemented by an independent society, GRIHA Council. In addition the Ministry is also promoting solar rooftop and solar water heating systems for installations in buildings. This will help to make a building green.

The reduction in budgeted plan outlay under Urban, Industrial and Commercial Applications since 2013-14 has been on account of continued reduction in Gross Budgetary Support (GBS) to MNRE's Plan Outlay, e.g. GBS reduced from Rs 951 crore in 2014-15 (BE) to Rs.541 crore at RE stage and further to Rs.287.67 crore in 2015-16(BE). This declining trend in GBS has adversely affected the programmes (including programme on Urban, Industrial and Commercial Applications) the being funded out of Gross Budgetary Support (GBS) component of the Ministry's plan outlay.

[Ministry of New and Renewable Energy
O.M. No. 8/1/2014-P&C dated: 21/08 /2015]

Research, Design, Demonstration and Development in New and Renewable Energy (RDD&D)

(Recommendations No. 10)

The Committee note that the underlying purpose of RD&D efforts of the Ministry is to make industry competitive and renewable energy generation supply self-sustainable/profitable and thereby contribute to increase its share in total energy mix in the country. On scrutiny of the last three years' performance of the Ministry, the Committee observe enhanced budgetary allocation at RE stage during the year 2011-12 i.e from Rs.93 crore (BE) to Rs. 111.53 (RE)and the actual expenditure of Rs.109.92 crore. However, in the years 2012-13 and 2013-14, BE of Rs.192 crore and Rs.158 crore were reduced to Rs.126 crore and Rs.148.50 crore respectively at RE stage and the Ministry could spend Rs.108.90 crore and Rs.136.97 crore only during these years.For the year 2014-15, an amount of Rs 149.50 crore is allocated, which includes Rs. 95.0 crore for RDD&D, and the remaining budget is for MNRE Institutions, namely, National Institute of Solar Energy (NISE), Gurgaon, National Institute of Wind Energy, Chennai and National Institute of Renewable Energy, Kapurthala.Regarding the major research projects undertaken during the last three years, the Committee were informed that technology development for higher efficiency solar cells, solar thermal power generation, biomass gasification including development of specifications and standards of biomass energy systems, biofuels, demonstration of enriched biogas as transport fuel for vehicular application, hydrogen energy storage and fuel cell and technology demonstration projects on biogas generation, purification and bottling of enriched biogas for various applications have been taken up.For the year 2014-15, the emphasis is to support RD&D efforts for faster development of technology for commercialization.Important areas of RD&D include solar thermal technology, solar photovoltaic technology, biogas, biofuel, hydrogen and fuel cells. It is also informed that the policy and guidelines for support of RD&D is under revision.The Committee desire that the thrust area of research and development activities should include resource identification, resource assessment, technological development, demonstration, popularization, cost competitiveness and commercialization of new and renewable energy

sources. They can become an effective alternative of conventional sources of energy provided due attention is given to R&D in this sector. The Committee also feel that the R&D is the most crucial and prime factor for development of all the renewable sources of energy especially keeping in mind the shift of country's focus from fossil fuel (coal/gas/oil) to these renewable sources of energy like solar, wind, hydrogen, biogas, etc. The Committee urge the Ministry to focus on technological advancements and hence, recommend that indigenous research and development in the field of renewable energy should be given utmost priority to bring down the cost of renewable equipment substantially and improve their efficiency considerably to attract substantive investment.

Reply of the Government

The policy and guidelines for research, development and demonstration (R&RD) are in the process of revision and all important aspects of technology development and demonstration, including the ones suggested by the Committee, are being considered for inclusion in a cost effective manner. The resource assessment aspects are presently being pursued vigorously by National Institute of Wind Energy (NIWE), Chennai and the National Institute of Solar Energy (NISE), Gurgaon. NIWE, Chennai in collaboration with ISRO is also working on utilizing satellite based data for estimating Solar and Wind potential across the country. The Ministry is also considering to introduce an award system for encouraging young scientists for innovation in new and renewable energy. A brainstorming consultation meeting is being planned for discussion on achievements made and for identifying the thrust areas. R&D conclave is also proposed to be organized in the August/September, 2015 for sharing the achievements of R&D and seeking the views of researchers, experts, policy matters to take the progress further for better results.

[Ministry of New and Renewable Energy
O.M. No. 8/1/2014-P&C dated: 21/08/2015]

CHAPTER III

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

Nil

CHAPTER IV

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

Demands for Grants of MNRE for 2014-15

(Recommendations No. 3)

The Committee find that the budgetary allocation of Rs.1521crore (BE) during the year 2013-14 was enhanced to Rs.1737.67 crore at RE stage. This includes provision of Rs.1313.16 crore from National Clean Energy Fund (NCEF). The Committee appreciate the Ministry's effort to get supplementary Demands for Grants at RE stage. The actual expenditure of Rs.1619.03 crore during the year 2013-14 which is 93 percent of the enhanced budget is also satisfactory. The Committee note that the Ministry has got a increase (Rs.781.33 crore) in the Budget Estimate for the year 2014-15 (Gross Budgetary Support of Rs.2519 crore) over the Revised Estimates of previous year (Gross Budgetary Support of Rs.1737.67 crore). The Committee also note that the Ministry had sought a Gross Budgetary Support to the tune of Rs. 5449 crore in their annual plan. However, an amount of Rs.1519 crore was allocated as BE 2014-15 by Planning Commission and Ministry of Finance in the Interim Budget which was increased to Rs.2519 crore in the Regular Budget. The Committee were informed that the allocated BE of Rs. 2519 crore includes Rs.1000 crore for the budget announcements essentially for solar energy programmes and to that effect, there was no increase in BE for the regular on-going programmes of the Ministry. As such, the physical targets for 2014-15 were fixed keeping in view the BE provided in the Interim Budget. Scrutiny of the information supplied by the MNRE reveals that the programme of the Ministry such as wind power and solar power have suffered a setback due to shortage of funds thereby creating pending liabilities for future. The Committee were informed that the Ministry is formulating proposals for availing funding under National Clean Energy Fund (NCEF) to meet the physical targets. Keeping in view the significance of renewable energy vis-à-vis conventional energy, the Committee recommend that the Ministry of New and Renewable Energy should pursue with the Ministry of Finance and get allocation of more funds so that the renewable energy programmes may not face a setback.

Reply of the Government

The Committee have reiterated the facts that (a) the funds allocated to the Ministry are not commensurate with the targets set for the short to medium term, (b) additional funds provided in 2014-15 were essentially for new schemes/projects announced in Budget for the year. As a result of which pending liabilities are mounted under the ongoing schemes/programmes of

the Ministry. Within the available budgeted outlay, Ministry is partly meeting the past liabilities and partly used for the sanction of new projects under ongoing schemes/programme. As Ministry's ongoing schemes/programmes are increasingly funded from NCEF, Ministry is pursuing at various levels with Ministry of Finance to provide adequate funding both from NCEF and gross budgetary support for the ongoing schemes/programmes.

Besides, to achieve the enhanced targets of capacity addition under grid-interactive renewable energy, the new projects are posed for/approved for funding the Union Government's share in the form of VGF/subsidies/grants from NCEF. It is informed that till the last meeting of the Inter Ministerial Group on funding of projects from NCEF held on 30.4.2015, Ministry has been able to obtain the approval for 27892.17 crore, which is equivalent to the proportion of the total project cost to be funded from NCEF over the period of next 7-8 years. As per the IMG's recommendations, funds of the order of 5264.42 crore are to be provided from NCEF during the current financial year (2015-16), however despite the fact that Ministry pursued with Ministry of Finance at various levels to provide the sanctioned funds in the First Batch of Supplementary Demands for Grants, Ministry of Finance recommended only Rs 500 crore during 2015-16. MNRE would continue to pursue with Ministry of Finance to provide the remaining funds in the Second Batch of Supplementary Demand for Grants to be place before the Parliament during it Winter Session in November/December, 2015.

Comments of the Committee

(Please see Para No. 9 of Chapter – I of the Report)

Remote village Electrification Programme

(Recommendations No. 8)

Under Remote Village Electrification Programme (RVEP), the Committee observe that during 2012-13 no budget was allocated. The Committee were informed that it was due to uncertainty about the continuity of the programme from 11th Plan to 12th Plan. The Committee were further apprised that the existing scheme of RVEP will be continued as Rural Village Electrification Programme Phase-II during 12th Five Year Plan with a financial outlay of Rs.1000 crore. The financial outlay for 2014-15 is Rs.14 crore with a physical target to sanction 250 new villages/hamlets. The Committee are aware that the RVEP is being implemented for providing basic lighting in those remote un-electrified villages and hamlets where grid extension is not found feasible. The Committee had earlier infact, recommended for continuity of the programme in the 12th Five Year Plan as well. Hence, the approval for continuation of the existing RVEP as RVEP

Phase-II is applaudable. Keeping in view the significance of the programme for the remote and far flung areas and the objectives and purpose for which the programme is being extended, the Committee recommend the Ministry to make serious efforts so that the plans are implemented and the rural people reap the intended benefits.

Reply of the Government

Continuation of modified Remote Village Electrification Programme (RVEP) was discussed in EFC meeting during the year 2014-15 in which decision was taken to continue the programme with no modification with limited available funds. The Ministry is making effort in clearing old liabilities, however new project will be considered after clearing the claims received for already completed projects.

Comments of the Committee

(Please see Para No. 14 of Chapter – I of the Report)

CHAPTER V

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

Nil

**New Delhi
December, 2015
Agrahayana ,1937 (Saka)**

**DR. KIRIT SOMAIYA,
Chairperson,
Standing Committee on Energy**

Annexure

| Commissioning Status of Grid Connected Solar Power Projects | | | | | | | | |
|---|-------------------|------------------------|-----------------|--------|---------------|-------------------------------|----------|--|
| Sr. No. | State/UT | Total MNRE Projects MW | State Policy MW | RPO MW | REC Scheme MW | Pvt. Initiative (Roof top) MW | CPSUs MW | Total commissioned capacity till 30-07-15 (MW) |
| 1 | Andhra Pradesh | 94.75 | 122.19 | 0 | 38.7 | 2.82 | 10 | 268.46 |
| 2 | Arunachal Pradesh | 0.025 | 0 | 0 | 0 | 0 | 0 | 0.025 |
| 3 | Chhattisgarh | 4 | 1.18 | 0 | 4.6 | 0.5 | 0 | 10.28 |
| 4 | Gujarat | 20 | 873.05 | 50 | 6 | 51 | 0 | 1000.05 |
| 5 | Haryana | 7.8 | 0 | 0 | 0 | 0 | 5 | 12.8 |
| 6 | Jharkhand | 16 | 0 | 0 | 0 | 0 | 0 | 16 |
| 7 | Karnataka | 15 | 50 | 10 | 0 | 4.22 | 9 | 88.22 |
| 8 | Kerala | 0.025 | 0 | 0 | 0 | 0 | 0 | 0.025 |
| 9 | Madhya Pradesh | 225.25 | 232.55 | 0 | 80.78 | 0 | 65 | 603.58 |
| 10 | Maharashtra | 72 | 126 | 50 | 121.32 | 9.38 | 0 | 378.7 |
| 11 | Orissa | 12 | 5 | 0 | 4.5 | 0.42 | 10 | 31.92 |
| 12 | Punjab | 10.5 | 181 | 0 | 7.52 | 0.25 | 0 | 199.27 |
| 13 | Rajasthan | 889.1 | 25 | 40 | 210.6 | 0 | 0 | 1164.7 |
| 14 | Tamil Nadu | 26 | 18 | 0 | 98.16 | 15.82 | 0 | 157.98 |
| 15 | Telangana | 0 | 33.25 | 0 | 23.4 | 6.1 | 0 | 62.75 |
| 16 | Tripura | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| 17 | Uttar Pradesh | 12 | 42 | 0 | 0 | 1.75 | 15.51 | 71.26 |
| 18 | Uttarakhand | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| 19 | West Bengal | 2.05 | 5 | 0 | 0 | 0.16 | 0 | 7.21 |

| | | | | | | | | |
|--|-------------------|-----------------|----------------|------------|---------------|---------------|---------------|-----------------|
| 20 | Andaman & Nicobar | 0.1 | 0 | 0 | 0 | 0 | 5 | 5.1 |
| 21 | Delhi | 0.335 | 0 | 0 | 2.14 | 4.237 | 0 | 6.712 |
| 22 | Lakshadweep | 0.75 | 0 | 0 | 0 | 0 | 0 | 0.75 |
| 23 | Puducherry | 0.025 | 0 | 0 | 0 | 0 | 0 | 0.025 |
| 24 | Chandigarh | 5.041 | 0 | 0 | 0 | 0 | 0 | 5.041 |
| 25 | Others | 0.79 | 0 | 0 | 0 | 0 | 0 | 0.79 |
| TOTAL | | 1418.541 | 1714.22 | 150 | 602.72 | 96.657 | 119.51 | 4101.648 |
| Commissioning of Telangana State has been introduced w.e.f 01.11.2014 | | | | | | | | |

**MINUTES OF THE EIGHTH SITTING OF THE STANDING COMMITTEE
ON ENERGY (2015-16) HELD ON 3rd DECEMBER, 2015 IN COMMITTEE
ROOM 'B', PARLIAMENT HOUSE ANNEXE, NEW DELHI**

The Committee met from 1800 hrs. to 1830 hrs.

PRESENT

LOK SABHA

Shri Kirit Somaiya - Chairperson

- 2 Shri M. Chandrakasi
- 3 Shri Harish Dwivedi
- 4 Shri Bhagat Singh Koshyari
- 5 Shri Ravindra Kumar Pandey
- 6 Shrimati Krishna Raj
- 7 Shri Vinayak Bhaurao Raut
- 8 Shri Malyadri Sriram
- 9 Shri Bhanu Pratap Singh Verma

RAJYA SABHA

- 10 Shri Oscar Fernandes
- 11 Shri Pyarimohan Mohapatra
- 12 Shri Ananda Bhaskar Rapolu

SECRETARIAT

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

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

- i) Measures to Check Commercial Losses.

ii) Action Taken by the Government on the recommendations contained in the 43rd Report (15th Lok Sabha) on 'Development of Hydro Sector'.

iii) Action Taken by the Government on the recommendations contained in the 2nd Report (16th Lok Sabha) on Demands for Grants of the Ministry of New and Renewable Energy for the year 2014-15.

iv) Action Taken by the Government on the recommendations contained in the 5th Report (16th Lok Sabha) on Demands for Grants of the Ministry of Power for the year 2015-16.

3. After discussing the contents of the Reports in detail, the Committee adopted the aforementioned draft Reports. The draft Report on 'Measures to Check Commercial Losses' was adopted with slight modification. However, the remaining draft Action Taken Reports were adopted without any change. The Committee also authorized the Chairperson to finalize the above-mentioned Reports and present the same to both the Houses of Parliament in the current Session.

4. X X X X X X X X X X X X

The Committee then adjourned.

APPENDIX II

(Vide Introduction of Report)

ANALYSIS OF ACTION TAKEN BY THE GOVERNMENT ON THE OBSERVATIONS/ RECOMMENDATIONS CONTAINED IN THE SECOND REPORT (16TH LOK SABHA) OF THE STANDING COMMITTEE ON ENERGY

| | | |
|-------|---|-----|
| (i) | Total number of Recommendations | 10 |
| (ii) | Observations/Recommendations which have been accepted by the Government: | |
| | Sl.Nos. 1,2,4,5,6,7,9 and 10 | |
| | Total: | 08 |
| | Percentage | 80% |
| (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. 3 and 8 | |
| | Total: | 02 |
| | Percentage | 20% |
| (v) | Observations/Recommendations in respect of which final replies of the Government are still awaited: | |
| | Nil | |
| | Total: | 0 |
| | Percentage | 0% |