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# STANDING COMMITTEE ON ENERGY (2011-2012)

FIFTEENTH LOK SABHA

# MINISTRY OF NEW AND RENEWABLE ENERGY

[Action Taken on the recommendations contained in the Fifteenth Report (15th Lok Sabha) on the subject 'Funding of New and Renewable Energy Projects']

# TWENTY FIRST REPORT



# LOK SABHA SECRETARIAT NEW DELHI

December, 2011/Agrahayana, 1933 (Saka)

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Presented to Lok Sabha on 14.12.2011 Laid in Rajya Sabha on 14.12.2011



LOK SABHA SECRETARIAT NEW DELHI

December, 2011/Agrahayana, 1933 (Saka)

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# COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2011-2012)

## Shri Mulayam Singh Yadav — Chairman

#### **M**EMBERS

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- 2. Shri Suvendu Adhikari
- 3. Mohammad Azharuddin
- 4. Dr. Baliram
- 5. Shri P.C. Chacko
- 6. Shri Adhir Ranjan Chowdhury
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- 18. Shri Sushil Kumar Singh
- 19. Shri Radha Mohan Singh (Purvi Champaran)
- 20. Shri Vijay Inder Singla
- 21. Shri Makansingh Solanki

## Rajya Sabha

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- 23. Shri V.P. Singh Badnore
- 24. Shrimati Shobhana Bhartia
- 25. Shri Shyamal Chakraborty
- 26. Shri Rama Chandra Khuntia
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- 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. Smt. Abha Singh Yaduvanshi Director
- 3. Shri N.K. Pandey Additional Director
- 4. Shri Manish Kumar Executive Assistant

#### INTRODUCTION

- I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this 21st Report on the action taken by the Government on the recommendations contained in 15th Report of the Standing Committee on Energy (15th Lok Sabha) on 'Funding of New and Renewable Energy Projects'.
- 2. The 15th Report was presented to Lok Sabha/laid in Rajya Sabha on 18th March, 2011. Replies of the Government to all the recommendations contained in the Report were received on 15th June, 2011.
- 3. The Report was considered and adopted by the Committee at their sitting held on 01st December, 2011.
- 4. The Committee place on record their appreciation for the valuable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.
- 5. An analysis on the Action Taken by the Government on the recommendations contained in the 15th Report of the Committee is given at Appendix-II.
- 6. 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; 12 December, 2011 21 Agrahayana, 1933 (Saka) MULAYAM SINGH YADAV, Chairman, Standing Committee on Energy.

#### REPORT

#### 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 Fifteenth Report (Fifteenth Lok Sabha) on the subject 'Funding of New and Renewable Energy Projects' pertaining to the Ministry of New and Renewable Energy.

- 2. The Fifteenth Report was presented to Lok Sabha on 18th March, 2011 and was laid on the Table of Rajya Sabha on the same day. The Report contained 11 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, 8, 10 and 11

Total-07 Chapter-II

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

Serial No. 9

Total-01 Chapter-III

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

Serial Nos. 3, 6 and 7

Total-03 Chapter-IV (iv) Recommendation/Observation in respect of which the final replies of the Government are still awaited:—

Serial. No. Nil

Total-00 Chapter-V

- 4. The Committee desire that Action Taken Notes on the Recommendations/Observations 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. Potential of Renewable Energy vis-à-vis achievement

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

- 6. The Committee had noted that the country has estimated potential of 90312 MW of new and renewable energy excluding the solar power which has estimated capacity of 20-30 MW per sq.km. for most part of the Country. Against this, the Country's present installed capacity from various renewable energy sources is only 16817 MW. The Committee had also observed that had we been able to use even a small percentage of total available solar energy potential that would have been more than enough to offset the gap between the demand and supply of power. Moreover, renewable energy sources are not only highly beneficial from energy point of view but also from ecological point of view as it is totally different from the energy that is coming from conventional sources i.e. coal/gas or any other fossil fuel of which sources are limited. The renewable energy sources are also everlasting, self sustaining without involving any human efforts in their evolution, development and sustenance. The Committee, considering the benefits of renewable energy and taking into account the present poor infrastructure, had strongly recommended that all out efforts should be made by the Government to evolve a comprehensive policy framework to facilitate the rapid growth of new and renewable energy projects so as to optimal utilization of available renewable sources in minimum possible time.
  - 7. The Ministry in their action taken reply have Stated:—

"The Ministry is already implementing the National Solar Mission launched in January last year, which lays down a comprehensive

policy framework for speedy development and deployment of solar energy systems in the country. Recently, the Ministry has prepared a Strategic Plan for New and Renewable for the next 5 year period till 2017. This includes resource specific targets for next 5 years, the aspiration goals for 2022 and action plan for achieving the same. .....Further; a Working Group has been constituted by the Planning Commission for formulation of 12th plan proposals for the new and renewable energy sector. This exercise is expected to be completed by September 2011 and the Strategic Plan will be modified suitably based on the report of the Working Group."

8. The Ministry in their action taken reply have Stated that they have prepared a Strategic Plan for new and renewable for the next 10 years period till 2022 including aspiration goals and action plan for achieving the same. The Ministry have further Stated that a Working Group has been constituted by the Planning Commission for formulation of 12th Plan proposals for the new and renewable energy Sector. This exercise is expected to be completed by September 2011 and the Strategic Plan will be modified suitably based on the report of the Working Group. The Committee do appreciate the Ministry for preparing a Strategic Plan for new and renewable for the next 10 years. The Committee feel that it is important to have long term strategy for effective control and coordination for structured and phased development of the sector and review the performance periodically. However, the Committee would like to emphasize the need for proper execution of these plans in a time bound manner. The Committee, therefore, would like the Government to not only keep constant vigil for timely execution of the planned programmes/strategy but also to foresee and take preemptive measures for the hurdles/problems that may come in future in implementation of plans/programmes and may impede the progress of the sector. The Committee would like to be apprised of the recommendations of the Working Group constituted by the Planning Commission for formulation of 12th Plan proposals for the new and renewable energy sector and the conclusive action taken by the Ministry in this regard.

#### B. Jawaharlal Nehru National Solar Mission

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

9. The Committee, after scrutiny of data and considering the slow pace of the work had expressed their concern over the possibility of under achievement of target of setting up 1000 MW of grid connected Solar Power projects under the first phase of National Solar Mission

by 2013. Further, the Ministry had informed that Rs. 12,000 crore to Rs. 15, 000 crore will be needed to set up the said 1000 MW of grid solar power projects. IREDA alone would not be able to fulfil this huge demand of funds. On the other hand the Ministry had not come up with any kind of collaboration or understanding with any nationalized bank or financial institutions to fund the projects coming up in Solar Mission. The Ministry was expected to have done collaboration/understanding with some nationalized banks/financial institutions and should have apprised them beforehand about the provisions made by the Government in regard to support of renewable energy projects making it easier for promoters to raise funds from these institutes. The Committee, therefore, had strongly recommended that the Government should act with urgency and dedication to make Jawaharlal Nehru Solar Mission a grand success and take all necessary steps to remove the hurdles of all kinds in proper implementation of the projects and set up a monitoring mechanism to evaluate the success of the Mission from time to time to ensure proper remedial measures for problems that may surface during the implementation of the projects.

10. The Ministry of New and Renewable Energy in their written reply have Stated:—

"Out of 1,000 MW capacity grid solar power projects through NTPC Vidyut Vyapar Nigam (NVVN) in 2010-11 a total of 704 MW capacity projects have been sanctioned. Solar PV projects of about 300 MW capacity are to be sanctioned in 2011-12, by December, 2011. These projects are all expected to be commissioned by 2013. This was done to ensure that (i) benefit of declining cost of PV modules is available for the PV projects as these projects can be completed in 12 months time, and (ii) bunching of large number of projects seeking funding is also avoided. The progress of sanctioning of the projects is as per schedule.

Ministry is regularly reviewing the progress of implementation of these grid solar power projects with the concerned States and the project developers to facilitate State level clearances and assistance. Recently the progress was reviewed on 28th April, 2011 in New Delhi. Another review was held on 2nd May, 2011 at Jodhpur with the project developers who are setting up solar power projects in Rajasthan. A similar review was held with project developers from Andhra Pradesh in Hyderabad on 16th May, 2011. Ministry is also holding meetings with the banks and other financial institutions to assist the project developers in financial closure of the projects, although it is the primary responsibility of the developers to make necessary financial arrangements.

With regard to the financial closure of the projects, out of 52 grid solar power projects for which PPAs have been signed by NNVN, so far 26 grid solar projects have reported financial closure through banks or internal resources. This includes 16 projects covered under migration. The financial closure of the remaining 26 projects is progressing. The reports from the project developers indicate that most of the other projects will be able to arrange financial closure by end of June, 2011, which is within the time limit, which is 9th July, 2011. The project developers are approaching various funding agencies. As a preference the project developers are first approaching their own bankers. IREDA, PFC, REC, SBI, ICICI, Yes Bank are among the various funding agencies who have been approached by the project developers for the grid solar power projects.

In addition, Ministry has held inter-ministerial consultations to prepare a proposal to provide need based budgetary support to NVVN as a payment security mechanism to ensure that NVVN is able to make regular payments to the project developers. This step has been taken to address the concerns of the banks about bankability of the proposal in view of likely defaults by the State distribution companies in making timely payments to NVVN for the purchase of solar power.

Ministry is fully conscious of the fact that the success of the first phase of the Mission is crucial for the launching and success of the second phase of the Mission. Therefore, all necessary actions are being taken to facilitate implementation of the projects."

11. The Committee are happy to note that out of 1,000 MW capacity grid solar power projects through NTPC Vidyut Vyapar Nigam (NVVN) in 2010-11, a total of 704 MW capacity projects have been sanctioned and Solar PV projects of about 300 MW capacity projects are to be sanctioned in 2011-12, by December, 2011. These projects are expected to be commissioned by 2013. However, the Committee observe that the financial closer of the 26 projects is yet to take place despite various measures taken by the Government. It should be ensured that this is not allowed to result in time and cost overrun of the proposed projects and delay in the achievement of targets. The Ministry have also informed the Committee that the projects developers are approaching various funding agencies. As emphasized by the Committee in their 15th Report, they expect the Government to closely monitor the progress of projects under the Nation Solar Mission and ensure the adequate fund availability to the projects developers so that these projects can be commissioned within the stipulated time limit *i.e.* by 2013. The Committee also feel that the proposal to provide need based budgetary support to NVVN as a payment security mechanism to ensure that NVVN is able to make regular payments to the projects developers is a step in right direction and will certainly help to boost the confidence of banks to finance the projects under the National Solar Mission.

# C. Research and Development Projects related to New and Renewable Energy

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

12. The Committee were unhappy to note the past performance of the MNRE in the field of R&D relating to the development of new and renewable energy sector. Budget outlays for R&D had been very less and the Ministry failed in spending even half of the allocated fund. The Ministry in the year 2007-08, 2008-09 and 2009-10 could spend only Rs. 31.74 crore, Rs. 27.80 crore and 43.85 (upto 28.02.2010) against the outlay of Rs. 60 crore, Rs. 100 crore and Rs. 78 crore respectively. In brief, the Government spent Rs. 103.39 crore which is mere 43% of the total outlay of Rs. 238 crore. The Committee also felt that the most common deterrence in promotion of renewable energy sources is the high initial cost of installation especially in case of solar energy. To bring down the same to a reasonable level technological advancement has to play a pivotal role. The Committee, therefore, had strongly recommended that the Government should not only focus in merely increasing the installed capacity but also in technological advancement as the same would make the renewable energy sector commercially viable resulting in massive increase in installed capacity due to private investment that too without being dependent on the aid and subsidy from the Government.

# 13. The Ministry of New and Renewable Energy in their action taken reply have Stated:—

"Ministry has been supporting R&D in solar energy to meet the challenges of reducing the cost and improving the overall performance of solar energy in general and solar power in particular. Several initiatives have been taken to support academic, research organizations and industry. In addition, industry on its own is also taking necessary steps to meet the short term technical challenges to improve the performance and reduce the cost. In the last two years the cost of grid solar power plants has already reduced from an average of Rs. 18 crore per MW to 12-14 crore per MW. The recent R&D efforts would help in further reduction in cost in the coming years."

14. The Committee had noted that the Ministry in the years 2007-08, 2008-09 and 2009-10 could spend only Rs. 103.39 crore which was mere 43% of the total outlay of Rs. 238 crore. Being unhappy over the under utilization of fund allocated for R&D in the field of new and renewable energy, the Committee expected the Government to ensure optimum utilization of allocated fund for the same. The Committee is dismayed to note that the Government in their action taken reply have mentioned nothing about this. Further, the Committee while emphasizing the pivotal role of technological advancement in bringing down the cost of new and renewable energy projects, had strongly recommended the Government to also focus on the technological advancement in the field of renewable energy with their efforts to increase the installed capacity as the same have the potential to give much needed thrust to renewable energy sector. In their action taken reply the Ministry have mentioned that they have been supporting R&D in solar energy to meet the challenges of reducing the cost and improving the overall performance of solar energy in general and solar power in particular. In addition, industry on its own is also taking necessary steps to meet the short term technical challenges to improve the performance and reduce the cost. The Committee is happy to note that in the last two years the cost of grid solar power plants has already reduced from an average of Rs. 18 crore per MW to 12-14 crore per MW but at the same time feel that still there is much scope for further reduction in cost if the research in this field are supported well by the Government. It is a well known fact that the most vital challenge for renewable energy sector in the Country is the high operational and maintenance cost that can only be brought down by in-depth research and innovation and for that Government's positive and effective intervention is imperative. The Committee would like that the Government should focus on Research and Development in the field for renewable energy to reduce the high cost. Simultaneously, the Government should ensure that the funds allocated for R&D purposes are optimally utilized.

# D. Role of Central Government in Funding of Renewable Energy Projects

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

15. The Committee had noted that the Government provides financial assistance/subsidy ranging from about 10% to as high as 90% of project costs of the new and renewable energy projects. The Committee felt that the Government besides providing financial assistance/subsidy must also ensure the monitoring of the projects which avail the benefits from the Government. It is likely that in absence of any regulation from

the Government, many manufacturers might not adhere to standard and quality as prescribed and make/install substandard products. The Committee also observed that there is also very poor after sale service of renewable energy products due to absence of proper infrastructure in this regard. This shakes the confidence of the end user, and poses a big deterrence in popularization of renewable products. The Committee, therefore, had strongly recommended that the Government should focus on developing specifications, certification, and standardization of renewable energy systems and products by making it mandatory for all the manufactures to obtain a quality control certification from a agency such as ISI etc. Simultaneously, for strengthening the after sales service network of new and renewable energy projects/ products, the Committee had also recommended that the Government should plan for setting up a dedicated nodal agency entrusted with the task of establishment of more and more after sale/installation service centres for projects/ products related to various sectors of new and renewable energy i.e. Solar, Wind, Small Hydel etc. by collaboration of State Governments, manufactures and technology institutions.

16. In their action taken reply, the Ministry have Stated:-

"The recommendations of the Committee for ensuring that government subsidy is utilized for deployment of quality products have been noted.

The Ministry has already prescribed Quality Standards to be followed for systems to be deployed under the National Solar Mission.

In case of Wind energy sector, installation of only such wind turbines which possess a valid type certificate from recognized certifying body or as per C-WET Type Certification Scheme known as TAPS-2000, is permitted. The task of preparation of BIS standards on various aspects of wind turbines has also been taken up by the wind turbines Sectional Committee-ET 42, constituted by BIS, of which C-WET is a member and is providing technical inputs.

With regard to the Committee's recommendation for setting up a dedicated nodal agency entrusted with the task of establishment of more and more after sale/installation service centres by collaboration of State Governments, manufactures and technology institutions, it is submitted that the specific sales/service requirements are highly region specific and can be best addressed by the State level Nodal Agencies (SNAs) already set up by respective

State Governments for promotion of renewable energy. The Ministry's endeavour is to support the efforts of the SNAs through suitable incentive mechanism under different programmes."

17. The Committee are happy that the Ministry have prescribed Quality Standards to be followed for systems to be deployed under the National Solar Mission. In wind energy sector also they are coming up with the standardization of products by BIS. However, there is scope for extending these activities to remaining segments of the renewable energy also. With regard to the Committee's recommendation for setting up a dedicated nodal agency entrusted with the task of establishment of more and more after sale/installation service centers by collaboration of State Governments, manufactures and technology institutions, the Ministry have apprised that the specific sales/service requirements are highly region specific and can be best addressed by the State level nodal agencies (SNAs) already set up by respective State Governments for promotion of renewable energy. They have further, Stated that the Ministry's endeavour is to support the efforts of the SNAs through suitable incentive mechanism under different programmes. The Committee feels that the quality and reliability of equipments, particularly for decentralized applications is one of the weaknesses of the Renewable Energy Sector in India. Further, the Committee have time and again felt that poor after sales service network poses a great deterrence in popularity of renewable energy devices. Although after sales/service requirements may be region specific, nonetheless, the Committee feel that even this region specific system has been in place with the active involvement and assistance of the Government. Hence to deflect the issue by putting onus on SNAs in this regard may lead to unbalanced/unequal service to the people and uneven development of the sector. The role the Government should be of a central catalyst rather than that of an indirect supporter or promoter. Therefore, a Nodal Agency be set up by the Government for specific purpose which can be an effective instrument for the Ministry to coordinate, guide and support the existing State level nodal agencies (SNAs). Moreover, the proposed Central Nodal Agency may also be entrusted with the task of formulating policies/providing financial/ fiscal incentives to SNAs. The Committee, therefore, reiterate their recommendation of setting up a dedicated nodal agency at Centre, entrusted with the task of establishment of more and more after sale/ installation service centers for projects/products related to various sectors of new and renewable energy. Such an institution should be a centre for excellence in the field with facilities of training, testing of new product/technologies and should be empowered to collaborate with similar foreign institutions.

# (V) Role of States in funding/implementation of Renewable Energy Projects

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

18. The Committee had been apprised that the States are responsible for putting in place suitable/conducive policy and regulatory framework at their level for promotion of renewable energy projects and also for State level statutory clearances for large capacity projects. The major problems in wind and hydro power sector are delays in land allotment, forest clearance, timely availability of evacuation and transmission facilities, regulatory issues at State level, uncertainness about the State policies on tariff, wheeling, banking, techno-economic approval from State (for hydro). It had been further informed that there is limited role of the Central Government in timely completion of the projects. The Committee had noted that the most common reason cited by the Ministry for delay in regard to the renewable energy Project has been the inactiveness or non-cooperation of the State Government. The Committee desired that being the central nodal agency for the promotion of renewable energy, the Ministry should share the responsibility of removing the obstacles coming in the way of promotion and funding of renewable energy projects. The Committee, therefore, had recommended a comprehensive policy in regard to the setting up of new and renewable energy project, which should be formulated by the involvement of all the States, so that its effective implementation can be ensured. The States may be given leverage to acclimatize the policy, according to their local needs without diluting the thrust areas, before its notification for implementation in the respective States. The Committee had also desired that the role of Centre should not be limited to providing only fiscal incentives and subsidy to the States but should expand to provide guidance and expertise also. Being the Nodal Agency in the field of new and renewable Energy, the Ministry should extend the suggestions/latest technological expertise to the States, help them to overcome the barriers, if any, in setting up renewable energy projects.

# 19. The Ministry in their written reply have Stated:—

"Regarding the Committee's recommendation for a comprehensive policy to be formulated by the involvement of all the States, for effective implementation of New and renewable energy projects, it is submitted that electricity is a concurrent subject and the States are free to frame and adopt their own promotional policies for development of renewable power projects within the framework of the Electricity Act 2003. Furthermore, the viability of renewable energy projects is highly region and resource specific and also

depends upon local conditions that vary widely. It also very much depends on the State level facilitations/incentives which cannot be expected to be uniform. Nonetheless, resource specific guidelines are issued by the Ministry that provide an umbrella policy and incentives framework for States and Developers for planning and implementation of different categories of projects. Guidelines are also issued from time to time through CERC on different aspects like fixation of tariffs, trading of renewable power, etc.

With regard suggestion of the Committee that the Ministry should extend the suggestions/latest technological expertise to the States, help them to overcome the barriers, if any, in setting up Renewable Energy projects, it is submitted that most projects are being set up in private sector. Necessary technical guidance is provided to interested developers through the technical institutions of the Ministry (Solar Energy Center, C-WET, NIRE) and the AHEC at IIT, Roorkee. Bottlenecks in implementation are addressed through periodic review meetings at States/Central level."

20. The Committee are unhappy over the evasive reply of the Ministry, in regard to formulation of a comprehensive policy, that electricity is a concurrent subject and the States are free to frame and adopt their own promotional policies for development of renewable power projects within the framework of the Electricity Act, 2003. The Committee had noted that the country has estimated potential of 90312 MW of new and renewable energy excluding the solar power which has estimated capacity of 20-30 MW per sq.km. for most part of the Country. Against this, the Country's present installed capacity from various renewable energy sources is only 16817 MW. It is apparent that we are utilizing only small portion of the renewable energy sources that the country has been endowed. The Committee has been apprised time and again that the one of the reason for non-deployment/delay of renewable energy projects is the inactiveness/non-cooperation of States. Some States are doing well in establishing renewable energy projects, whereas, others performances are far from being satisfactory. It is beyond doubt that the present day fuel supply crisis for power sector is here to stay, causing loss in power generation and to fill this vacuum; share of renewable energy in power mix has to be increased. In this scenario, where the Country badly needs power for growth, and so much potential for renewable energy is there in the Country, the need for comprehensive policy becomes more acute. Therefore, the matter of developing renewable energy sources cannot be left in lurch just for the reason that some State(s) are not taking desired initiative

for proper facilitation for setting up renewable energy projects. With a view to ensure that promotion/development/utilization of renewable energy is not limited to only a few States but to all the States endowed with various renewable energy sources, the Committee had recommended formulation of a comprehensive policy. Such an umbrella policy can be region, resource and technology specific, encompassing the divergent local conditions. As its guidelines are being issued by the Government which are region and resource specific. The Committee, therefore, reiterate their recommendation and would like to be apprised of the development in this regard.

#### **CHAPTER II**

# OBSERVATIONS/RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

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

#### (I) Potential of Renewable Energy vis-à-vis achievement

2.1 The Committee note that the country has estimated potential of 90312 MW of New and Renewable Energy excluding the solar power which has estimated capacity of 20-30 MW per sq.km. for most part of the Country. Against this, the Country's present installed capacity from various Renewable Energy sources is only 16817 MW. We are using very small part of currently available renewable energy whereas it should have been harnessed more. Had we been able to use even a small percentage of total available solar energy potential that would have been more than enough to offset the gap between the demand and supply of power. Renewable Energy sources are not only highly beneficial from energy point of view but also from ecological point of view also as it is totally different from the energy that is coming from conventional sources i.e. coal/gas or any other fossil fuel of which sources are limited. The Renewable Energy sources are everlasting, self sustaining without involving any human efforts in their evolution, development and sustenance. Therefore, the more emphasis we lay on utilizing the available New and Renewable Energy sources the better it will be for environment as well as for the development of the Country. Though, the MNRE have lately come up with some specific plans and have started doing well in comparison to the cumulative achievement made upto the end of 10th Five Year Plan, there is still a long way to go. As the Country has herculean task in hand and the MNRE has their own limitations in terms of funds and infrastructure particularly in far off/ hilly areas, there is a need for a comprehensive policy encompassing all aspects including accurate assessment of potential, effective and efficient infrastructure, friendly regulatory system and an investment friendly environment to give a much needed thrust to this sector. Considering the importance of the Renewable Energy, the Committee strongly recommend that all out efforts should be made by the Government to evolve a comprehensive policy framework to facilitate the rapid growth of New and Renewable Energy projects so as to optimal

utilization of available Renewable sources in minimum possible time. The Committee would like to be apprised of the detailed action plan of the MNRE in this regard.

## Reply of the Government

The Ministry is already implementing the National Solar Mission launched in January last year, which lays down a comprehensive policy framework for speedy development and deployment of solar energy systems in the country. Recently, the Ministry has prepared a Strategic Plan for New and Renewable Energy for the next 5 year period till 2017. This includes resource specific targets for next 5 years, the aspiration goals for 2022 and action plan for achieving the same. This plan is available on the Ministry's website....Further, a Working Group has been constituted by the Planning Commission for formulation of 12th plan proposals for the new and renewable energy sector. This exercise is expected to be completed by September 2011 and the Strategic Plan will be modified suitably based on the report of the Working Group.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

#### Comments of the Committee

(Please see Paragraph 8 of Chapter – I of the Report)

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

#### (II) Jawaharlal Nehru National Solar Mission

2.2 The Committee are happy to note that the Government has approved the Jawaharlal Nehru National Solar Mission (JNNSM) which aims at setting up of 20,000 MW of grid solar power, 2,000 MW offgrid solar power including 20 million solar lights and 20 million square meter solar thermal collector area by the year 2022. The Mission also aims at the development and deployment of solar energy technologies in the Country to achieve parity with grid power tariff by 2022. The entire Mission will be implemented in three phases. On successful achievement of the targets set under this Mission, it is expected that the Country will be established as a global leader in Solar Energy. But the enormity of the target set under the Mission can be understood better when we juxtapose the targets set and the present installed capacity of solar energy of the Country which is meager 10 MW(peak) along with the preparatory framework put in place for the first phase of the Mission which is already in operation and will be completed

by March 2013. It is not that the target set is impossible to achieve but keeping in view the previous performance, the pace of work so far, the Committee would like the Ministry to play an aggressive approach for achieving targets set for first phase fully.

The Committee have been informed that the implementation of the second and third phase of the Jawaharlal Nehru National Solar Mission would depend on the success of the implementation of the first phase. Further, the Ministry have Stated that in case of grid connected solar power projects, the major component of 1,000 MW in the first phase of National Solar Mission is to be implemented through NTPC Vidyut Vyapar Nigam (NVVN). No funding for this has been proposed by the Ministry.

The Ministry has Stated that developers for setting up 620 MW of grid connected solar power projects have been identified. 30 project developers have been selected to set up 150 MW capacity of grid connected photovoltaic power plants and 7 promoters have been selected to set up 470 MW of solar thermal power plants. In addition to that 16 project developers have been selected to setup 84 MW capacity grid solar power plants under migration scheme from their respective existing arrangements to Jawaharlal Nehru National Solar Mission.

The Committee have been further informed that these projects are expected to complete their financial closure by July, 2011. For PV related projects 12 months are provided for commissioning of the Plants, whereas in case of the solar thermal power projects, the time given is 28 months. This means that if all projects complete their financial closure by July, 2011 as planned, even than some of the projects may miss the deadline of year 2013 as envisaged for setting up of 1000 MW of solar power under phase-I of the Solar Mission. Moreover, at present this set up at best will achieve only 704 MW of solar power, including the 84 MW projects which has been migrated to Solar Mission from the existing installation. For remaining 296 MW, developers are yet to be selected. In brief, the achievement of targets of 1000 MW, set under the first phase of the Solar Mission, whose success would decide the fate of the remaining two phases of the Mission, is highly unlikely to be achieved. When the success of whole Solar Mission critically depends on how the things turn out in first phase of the Mission, the lackadaisical approach of the Ministry in implementing the first phase of Mission is not only disappointing but also unacceptable.

Further, the Ministry have informed that Rs. 12,000 crore to Rs. 15, 000 crore will be needed to set up the said 1000 MW of grid solar power projects. IREDA alone will not be able to fulfill this huge

demand of funds. On the other hand the Ministry have not come up with any kind of collaboration or understanding with any nationalized bank or financial institutions to fund the projects coming up in Solar Mission. The solar power developers have been left in lurch as far as the finances of the projects are concerned. From the quantum of loans advanced by the Financial Institutions to this Sector, it appears banks and financial institutions are still reluctant to finance the solar power project due to the uncertainty of their economical viability. The Ministry was expected to have done collaboration/ understanding with some nationalized banks/financial institutions and should have apprised them beforehand about the provisions made by the Government in regard to support of Renewable Energy projects making it easier for promoters to raise funds from these institutes.

The Committee are inclined to infer that the Government is trying to achieve an extraordinary target with ordinary efforts and planning. Being the nodal agency for implementation of the Jawaharlal Nehru National Solar Mission it has the onus to remove the hurdles faced or anticipated in setting up of solar power projects, be it funding, various clearances or streamlining of the procedures. The Committee, therefore, strongly recommend that the Government should act with urgency and dedication to make Jawaharlal Nehru National Solar Mission a grand success and take all necessary steps to remove the hurdles of all kinds in proper implementation of the projects and set up a monitoring mechanism to evaluate the success of the Mission from time to time to ensure proper remedial measures for problems that may surface during the implementation of the projects.

#### Reply of the Government

Out of 1,000 MW capacity grid solar power projects through NTPC Vidyut Vyapar Nigam (NVVN) in 2010-11 a total of 704 MW capacity projects have been sanctioned. Solar PV projects of about 300 MW capacity are to be sanctioned in 2011-12, by December, 2011. These projects are all expected to be commissioned by 2013. This was done to ensure that (i) benefit of declining cost of PV modules is available for the PV projects as these projects can be completed in 12 months time, and (ii) bunching of large number of projects seeking funding is also avoided. The progress of sanctioning of the projects is as per schedule.

Ministry is regularly reviewing the progress of implementation of these gird solar power projects with the concerned States and the project developers to facilitate State level clearances and assistance. Recently the progress was reviewed on 28th April, 2011 in New Delhi. Another review was held on 2nd May, 2011 at Jodhpur with the project developers who

are setting up solar power projects in Rajasthan. A similar review was held with project developers from Andhra Pradesh in Hyderabad on 16th May, 2011. Ministry is also holding meetings with the banks and other financial institutions to assist the project developers in financial closure of the projects, although it is the primary responsibility of the developers to make necessary financial arrangements.

With regard to the financial closure of the projects, out of 52 grid solar power projects for which PPAs have been signed by NVVN, so far 26 grid solar projects have reported financial closure through banks or internal resources. This includes 16 projects covered under migration. The financial closure of the remaining 26 projects is progressing. The reports from the project developers indicate that most of the other projects will be able to arrange financial closure by end of June, 2011, which is within the time limit, which is 9th July, 2011. The project developers are approaching various funding agencies. As a preference the project developers are first approaching their own bankers. IREDA, PFC, REC, SBI, ICICI, Yes Bank are among the various funding agencies who have been approached by the project developers for the grid solar power projects.

In addition, Ministry has held inter-ministerial consultations to prepare a proposal to provide need based budgetary support to NVVN as a payment security mechanism to ensure that NVVN is able to make regular payments to the project developers. This step has been taken to address the concerns of the banks about bankability of the proposal in view of likely defaults by the State distribution companies in making timely payments to NVVN for the purchase of solar power.

Ministry is fully conscious of the fact that the success of the first phase of the Mission is crucial for the launching and success of the second phase of the Mission. Therefore, all necessary actions are being taken to facilitate implementation of the projects.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

#### Comments of the Committee

(Please see Paragraph 11 of Chapter – I of the Report)

Recommendation (Sl. No. 1 Para No. 2.4)

2.4 The Committee also find that the Country has yet not achieved excellence in any sphere of R&D related to Renewable Energy when we compare it with the achievement of other advanced countries in

this field. Therefore, the Government should concentrate on Research and Development by developing indigenous technology by making available enough funds and incentives to not only IITs but also to private sector where enthusiastic and result oriented technical research is being done as well as by collaboration with the technologically advanced countries in the field of New and Renewable Energy. Providing incentives/aids to the technology institutions such as IITs will be an investment, the benefit of which will be reaped sooner or later. Simultaneously, the Committee also strongly recommend that there is greater urgency for substantial increase in the outlay for Research and Development in New and Renewable Energy sector for much needed thrust required for this sector.

# Reply of the Government

The Ministry accepts the recommendation to enhance the outlay for R&D. This recommendation will be a guiding force for formulation of the R&D budget and R&D needs in the 12th plan period.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

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

2.5 The Committee note that there is a considerable gap between budget estimation and the actual spending of the Ministry. The actual spending of the Ministry during the year 2007-08, 2008-09 and 2009-10 has been Rs. 478.72 crore, Rs. 441.79 crore and Rs. 548.83 crore, against the budget estimation of Rs. 628 crore, Rs. 620 crore and Rs. 620 crore respectively during the three years. The Committee are unhappy to find under-utilization of earmarked funds. The Ministry of New and Renewable Energy have already been fixing moderate targets, furthermore, they have failed to achieve even that consistently. Less spending of the Budget fund by the Government also means less achievement in terms of physical targets.

The Committee have also been apprised that the budget outlay for 2010-11 is Rs. 1,000 crore and Rs. 1,500 crore for the year 2011-12 to achieve the goals set up during the 11th Plan Period as approved at Mid-term Appraisal stage. After examining the subject in detail, the Committee have found that after the announcement of the Jawaharlal Nehru National Solar Mission in 2009, the scenario of Renewable Energy sector has changed significantly. The awareness about the importance and promotion of New and Renewable Energy has increased. Mammoth targets in terms of installed capacity set under the National Solar Mission as well as in 12th Plan have, increased the responsibilities of

the Ministry many folds. On the other hand the resources of the Ministry have not been increased in that proportion. Against this backdrop, the Committee feel that the MNRE should play a leading role of expert, mentor and patron in promotion of Renewable Energy in the Country. To achieve this, proactive role of the MNRE is essential to ensure not only adequate resources required by the Sector but also for investor friendly environment. As Renewable Energy sector is new and there is lack of infrastructure, the investors are not very enthusiastic to make investment in this sector. Therefore, endeavour of the Ministry should be on development of infrastructure for New and Renewable Energy projects. The Ministry has set a huge target of capacity addition of New and Renewable Energy to the tune of 13320 MW, whereas the Country's total present installed capacity is only 16817 MW. The Committee, therefore, recommend that with a view to achieve the target, corresponding increase should also be ensured in the Budget of the Ministry to commensurate with the quantum of targets set under 12th Plan. This would enable the Ministry to play more influential role in development of necessary infrastructure and more assured/effective funding of projects related to Renewable Energy.

## Reply of the Government

The recommendations of the Committee have been noted. The Ministry will continue its proactive efforts for development of the sector as suggested by the Committee with increased vigor. It is also in full agreement with the Committee's recommendation to enhance the Budget of the Ministry commensurate with the increased targets envisaged for 12th plan period, and will duly highlight the same before the Planning Commission in the Plan proposals.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

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

## (VI) Role of IREDA in Funding of Renewable Energy Projects

2.8 The Committee note that the corpus of the Indian Renewable Energy Development Agency (IREDA) has been Rs. 797 crore, Rs. 870 crore, Rs. 950 crore for the years 2007-08, 2008-09, 2009-10 respectively. The Committee have been apprised that the IREDA, the only PSU and the financing arm of the Ministry, is entrusted with the financing of Renewable Energy projects for which it arranges resources from the market through borrowings from the market and bilateral/multilateral agencies, internal accruals and Equity provided by the Ministry. In regard to the requirements of funds for

the forthcoming 12th Plan, the Committee have been given to understand that a total investment to the tune of Rs. 1,50,000 crore shall be required. However, the sources of this fund requirement are yet to be identified. Against this backdrop, the corpus of the IREDA, which is the sole fund lending institution dedicated to New and Renewable Energy Projects, is woefully insufficient. Being the specialist institution in this sector, IREDA has to play a role of catalyst in promotion and the funding of New and Renewable Energy projects and to instill the confidence among other Financing Institutions about the Renewable Projects as also about their economic viability. IREDA has been involved in this field for quite a long time and has vast experience. Although, IREDA has been a profit making PSU which has earned profit (after tax) to the tune of Rs. 10.20 crore, Rs. 13.16 crore and Rs. 16.91 crore during the years 2007-08, 2008-09, 2009-10 respectively, yet it is in no position to play a pivotal role in the funding of New and Renewable Energy projects as envisaged to attain the targets set in this sector for the coming years. The Committee, therefore, recommend that the Ministry should properly utilize the expertise of IREDA in funding of Renewable Energy projects by taking effective measures to increase its corpus, encouraging to join the bandwagon for developing this sector and enabling to become a leading light for Financial Institutions. Needless to emphasise that the Ministry would take necessary steps to expand the capital base of IREDA alongwith requisite technical power support.

# Reply of the Government

With regard to the Committee's recommendation for taking effective measures to increase IREDA's corpus, the same would require infusion of additional equity either by the Government itself, or from the market by way of a public issue/ IPO. The Ministry has been regularly providing equity support of up to Rs. 50 cr. each year, increasing its capital base to Rs.639.60 cr. Need for allocation of more funds for expanding the capital base of IREDA will be placed before Planning Commission in the 12th plan proposals of the Ministry. Equity augmentation from the market through an IPO could also be considered at an appropriate stage depending on IREDA's performance and market conditions.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

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

2.10 The Committee note that the short gestation period for installing wind turbines, and the increasing reliability and performance

of wind energy machines has made wind power a favoured choice for capacity addition in the Country. These reasons have led to joining of this sector by private players in a big way providing the lion's share to wind power sector out of present installed capacity of New and Renewable Energy. In the case of wind power projects, the Ministry had not been providing any financial support but only fiscal incentives and the wind power capacity has been achieved mainly through private sector participation. Recently the Government has introduced Generation Based Incentive (GBI) scheme for the developers who are not availing Accelerated Depreciation benefit which in view of the Committee is a step in right direction as it will encourage the project developers to generate more and more wind power instead of abandoning the projects after availing the benefits from the Government. Further, the Ministry has set a capacity addition target of wind energy to the tune of 17400 MW for 12th Plan against the target of 9000 MW for the ongoing 11th Five Year Plan. The wind power projects are capital intensive; hence, huge amount of fund will be required in setting up of these projects to achieve the target fixed for 12th Plan. Though, It has been stated by the Ministry that the funding of wind projects has not been a constraint as IREDA and other financial institutions like Power Finance Corporation (PFC) and Nationalized Banks are providing loans to wind power projects, the scrutiny of the Committee revealed that there were slippages during the year 2008-09 and 2009-10 in the achievement of target in this sector. The reasons for the same have been assigned by the Ministry to global economic recession, policy/regulatory issues and local problems in some of the States which has adversely affected the private sector investment. The Committee, therefore, recommend that all efforts should be made to persuade the States endowed with enough potential for setting up wind power projects to formulate favourable policies for this sector so that the barriers in setting up of wind power projects can be removed, making this sector investor friendly. Moreover, with a view to keeps the momentum going, required facilities and availability of finances should also be ensured to private entrepreneurs to give the proper thrust for further development of this Sector.

#### Reply of the Government

The target of wind power for the 12th Plan is 11200 MW. The wind power development is taking place with private sector investment. The installations during 2008-09 and 2009-10 were low. Ministry took all efforts through consultation, review meetings and visits by its officers etc. in the problematic States. The situation during the year 2010-11 improved and the installations increased substantially as compared to 2008-09 and 2009-10. A capacity of 2350 MW was installed against a target of 2000

MW during 2010-11. Ministry will put all efforts to keep the momentum going as suggested by the Committee.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

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

2.11 The Committee note the fact that Small Hydel Projects (SHPs) have the potential to meet power requirements of remote and isolated areas. Also they do not encounter the problems associated with large hydel projects of deforestation and resettlement. SHPs have reached commercial stage, therefore, private sector has started showing interest in investing in this sector. The Country has the estimated power generation potential of 15380 MW from SHPs. Acknowledging the importance of the subject the Committee have examined the subject Small and Mini Hydel Projects in detail and presented their Report on the Subject. The Committee expect the Government to make sincere efforts to implement the recommendations of the Committee made in the Report in letter and spirit.

#### Reply of the Government

The Ministry is making sincere efforts to implement the recommendations made by the Committee in the 16th Report on small and mini hydel projects. Action Taken Report on this is being submitted separately to the Committee.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

#### CHAPTER III

# OBSERVATIONS/RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE GOVERNMENT'S REPLIES

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

2.9 The Committee also observe that the number of projects sanctioned by the IREDA during the years 2007-08, 2008-09, 2009-10 has been 29, 47 and 29 respectively. It shows that the financing of IREDA has been limited to few and relatively bigger projects. The Committee also found that arranging fund for bigger Renewable Energy Projects is relatively easier than the small projects due to their economical viability. The Committee, therefore, recommend that IREDA should also focus in funding the smaller Renewable Energy Projects with more attractive interest rates and simpler procedures to obtain loan, thereby facilitating the growth of the sector throughout the Country particularly in the areas which are deprived of the electricity.

## Reply of the Government

To encourage deployment of small solar energy systems in rural areas the Ministry is implementing a special "Solar Off-Grid Refinance Scheme" through NABARD for providing loan with more attractive interest rates and simple procedures, keeping in view of NABARD's better positioning than IREDA *w.r.t.* establishment as well as outreach *via* its large network of Regional Rural Banks (RRBs) besides commercial banks. IREDA is also in the process of introducing such a refinancing scheme though commercial banks in the country.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

#### CHAPTER IV

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

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

(III) Research and Development Projects related to New and Renewable Energy

2.3 The Committee observe that we are aspiring for a mammoth target under the Jawaharlal Nehru National Solar Mission, the success of which will much depend on the technological acumen and expertise we have. The technological advancement has direct role in bringing the cost down to reasonable level, efficacy, efficiency and durability of the equipments required by solar energy sector. Therefore, rapid advancement instead of gradual improvement in the Renewable Energy technology can be the only way in the attainment of ambitious target of National Solar Mission. The Committee are anguished to note the past performance of the MNRE in the field of R&D relating to the development of New and Renewable Energy sector. Budget outlays for R&D have been very less and the Ministry has failed in spending even half of the allocated fund. The Ministry in the year 2007-08, 2008-09 and 2009-10 could spend only Rs. 31.74 crore, Rs. 27.80 crore and 43.85 (upto 28.02.2010) against the outlay of Rs. 60 crore, Rs. 100 crore and Rs. 78 crore respectively. In brief, the Government have spent Rs. 103.39 crore which is mere 43% of the total outlay of Rs. 238 crore. The Committee feel that the most common deterrence in promotion of Renewable Energy sources is the high initial cost of installation especially in case of solar energy. To bring down the same to a reasonable level technological advancement has to play a pivotal role.

The Committee strongly recommend that the Government should not only focus in merely increasing the installed capacity but also in technological advancement as the same would make the renewable energy sector commercially viable resulting in the massive increase in installed capacity due to private investment that too without being dependent on the aid and subsidy from the Government. The Committee note that major thrust in R&D revolves around Solar Energy

sector and 19 R&D Projects are under implementation on different aspects of solar thermal and PV technologies. Centre of Excellence are also proposed in this regard working in the development of solar grade polysilicon material, high efficiency solar cells, multifunction thin film modules, organic solar cells, dye sensitized solar cells etc. However, all this work is still at the incipient stage and may take a while before its universal usage as anticipated.

#### Reply of the Government

Ministry has been supporting R&D in solar energy to meet the challenges of reducing the cost and improving the overall performance of solar energy in general and solar power in particular. Several initiatives have been taken to support academic, research organizations and industry. In addition, industry on its own is also taking necessary steps to meet the short term technical challenges to improve the performance and reduce the cost. In the last two years the cost of grid solar power plants has already reduced from an average of Rs. 18 crore per MW to 12-14 crore per MW. The recent R&D efforts would help in further reduction in cost in the coming years.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

#### Comments of the Committee

(Please see Paragraph 14 of Chapter – I of the Report)

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

2.6 The Committee note that the Government provides financial assistance/subsidy ranging from about 10% to as high as 90% of project costs of the New and Renewable Energy projects. The Committee feel that the Government besides providing financial assistance/subsidy must also ensure the monitoring of the projects which avail the benefits from the Government. It is likely that in absence of any regulation from the Government, many manufacturers may not adhere to standard and quality as prescribed and make/install substandard products. There is also very poor after sale service of renewable energy products due to absence of proper infrastructure in this regard. This shakes the confidence of the end user, and poses a big deterrence in popularization of renewable products. We cannot expect from a common man that he would invest dearly in renewable energy products that too with no guarantee of proper working and after sale services just to save the environment. The Government should ensure that the financial assistance/subsidy provided are utilized for installation of quality products otherwise the role of the Government will be limited to the spending of allocated budget only. The Committee, therefore, strongly recommend that the Government should focus on developing specifications, certification, and standardization of renewable energy systems and products by making it mandatory for all the manufacture to obtain a quality control certification from a agency such as ISI etc. Further, it will be better if the onus of providing long term after sale services is also decided involving manufacturer of the products. Simultaneously, for strengthening the after sales service network of New and Renewable Energy projects/products, the Committee recommend that the Government should plan for setting up a dedicated nodal agency entrusted with the task of establishment of more and more after sale/installation service centers for projects/products related to various sectors of New and Renewable Energy *i.e.* Solar, Wind, Small Hydel etc. by collaboration of State Governments, manufactures and technology institutions.

# Reply of the Government

The recommendations of the Committee for ensuring that Government subsidy is utilized for deployment of quality products have been noted.

The Ministry has already prescribed Quality Standards to be followed for systems to be deployed under the National Solar Mission.

In case of Wind energy sector, installation of only such wind turbines which possess a valid type certificate from recognized certifying body or as per C-WET Type Certification Scheme known as TAPS-2000, is permitted. The task of preparation of BIS standards on various aspects of wind turbines has also been taken up by the wind turbines Sectional Committee-ET 42, constituted by BIS, of which C-WET is a member and is providing technical inputs.

With regard to the Committee's recommendation for setting up a dedicated nodal agency entrusted with the task of establishment of more and more after sale/installation service centers by collaboration of State Governments, manufactures and technology institutions, it is submitted that the specific sales/service requirements are highly region specific and can be best addressed by the State level Nodal Agencies (SNAs) already set up by respective State Governments for promotion of renewable energy. The Ministry's endeavour is to support the efforts of the SNAs through suitable incentive mechanism under different programmes.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

#### Comments of the Committee

(Please see Paragraph 20 of Chapter – I of the Report)

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

# (V) Role of States in funding/implementation Renewable Energy Projects

2.7 The Committee have been apprised that the programmes of promoting and financing of Renewable Energy Projects are mostly implemented through State Nodal Departments/State Nodal Agencies and in some cases through prominent NGOs also. Some of the States also provide additional subsidy to beneficiaries for the installation of renewable energy systems. The States are also responsible for putting in place suitable/conducive policy and regulatory framework at their level for promotion of renewable energy projects and also for State level statutory clearances for large capacity projects. The major problems in wind and hydro power sector are delays in land allotment, forest clearance, timely availability of evacuation and transmission facilities, regulatory issues at State level, uncertainness about the State policies on tariff, wheeling, banking, techno-economic approval from State (for hydro). It has been further informed that there is limited role of the Central Government in timely completion of the projects. The Committee note that the most common reason cited by the Ministry for delay in regard to the Renewable Energy Project has been the inactiveness or non-cooperation of the State Government. The Committee believe that even though the Ministry do not undertake the New and Renewable Energy Projects directly, their responsibility in respect of creating favourable conditions for setting Renewable Energy projects does not lessen in any manner. Being the central nodal agency for the promotion of Renewable Energy, the Ministry should share the responsibility of removing the obstacles coming in the way of promotion and funding of Renewable Energy projects. In this scenario, the Committee feel that there is need for a policy which should provide impetus to the States in regard to the promotion and facilitation of the Renewable Energy projects. The Committee, therefore, recommend a comprehensive policy in regard to the setting up of New and Renewable Energy project, which should be formulated by the involvement of all the States, so that its effective implementation can be ensured. The States may be given leverage to acclimatize the policy, according to their local needs without diluting the thrust areas, before its notification for implementation in the respective States. This mechanism will not only bring uniformity in regard to the promotion of the Renewable Energy but also help in streamlining the process of obtaining the various

clearances. Once, the problem of clearances and avoidable hindrances are overcome this sector will become more attractive for private investment.

Moreover, the role of Centre should not be limited to providing only fiscal incentives and subsidy to the States but should expand to provide guidance and expertise also. Being the Nodal Agency in the field of New and Renewable Energy, the Ministry should extend the suggestions/latest technological expertise to the States, help them to overcome the barriers, if any, in setting up Renewable Energy projects. This positive atmosphere will definitely attract more domestic as well as direct foreign investment in New and Renewable Energy sector.

## Reply of the Government

Regarding the Committee's recommendation for a comprehensive policy to be formulated by the involvement of all the States, for effective implementation of New and Renewable Energy projects, it is submitted that electricity is a concurrent subject and the States are free to frame and adopt their own promotional policies for development of renewable power projects within the framework of the Electricity Act, 2003. Furthermore, the viability of renewable energy projects is highly region and resource specific and also depends upon local conditions that vary widely. It also very much depends on the State level facilitations/ incentives which cannot be expected to be uniform. Nonetheless, resource specific guidelines are issued by the Ministry that provide an umbrella policy and incentives framework for States and Developers for planning and implementation of different categories of projects. Guidelines are also issued from time to time through CERC on different aspects like fixation of tariffs, trading of renewable power, etc..

With regard to suggestion of the Committee that the Ministry should extend the suggestions/latest technological expertise to the States, help them to overcome the barriers, if any, in setting up Renewable Energy projects, it is submitted that most projects are being set up in private sector. Necessary technical guidance is provided to interested developers through the technical institutions of the Ministry (Solar Energy Center, C-WET, NIRE) and the AHEC at IIT, Roorkee. Bottlenecks in implementation are addressed through periodic review meetings at States/Central level.

[Ministry of New and Renewable Energy File No. 8/9/2009-P&C Dated 15-6-2011]

#### Comments of the Committee

(Please see Paragraph 23 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; 12th December, 2011 21 Agrahayana, 1933 (Saka) MULAYAM SINGH YADAV, Chairman, Standing Committee on Energy.

#### APPENDIX I

# MINUTES OF THE THIRD SITTING OF THE STANDING COMMITTEE ON ENERGY (2011-12) HELD ON 1st DECEMBER, 2011 IN COMMITTEE ROOM 'D' PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1500 hrs. to 1630 hrs.

#### **PRESENT**

Shri Motilal Vora — in the Chair

#### **M**EMBERS

#### Lok Sabha

- 2. Shri Adhir Ranjan Chowdhury
- 3. Shri Syed Shahnawaz Hussain
- 4. Shri Baliram Jadhav
- 5. Shri Shripad Yesso Naik
- 6. Shri Jagdambika Pal
- 7. Shri Ravindra Kumar Pandey
- 8. Shri Vijay Inder Singla

## Rajya Sabha

- 9. Shri V.P. Singh Badnore
- 10. Shri Jesudasu Seelam
- 11. Shri Mohammad Shafi

#### SECRETARIAT

- 1. Shri Brahm Dutt Joint Secretary
- 2. Smt. Abha Singh Yaduvanshi Director
- 3. Shri Rajesh Ranjan Kumar Deputy Secretary

- 2. In the absence of the Chairman, the Committee chose Shri Motilal Vora, a Member of the Committee to act as Chairman for the sitting in accordance with Rule 258 (3) of the Rules of Procedure and Conduct of Business in Lok Sabha.
- 3. At the outset, the Chairman, welcomed the members of the Committee.

4.	***	***	***	***	***	***	***
5.	***	***	***	***	***	***	***
6	***	***	***	***	***	***	***

7. The Committee then took up for consideration the draft Reports on (i) Action Taken on the recommendations contained in the 15th Report on "Funding of New and Renewable Energy Projects" and (ii) Action Taken on the recommendations contained in the 16th Report on "Small and Mini Hydel Projects". The Committee adopted both the Reports without any modification. The Committee also authorized the Chairman to finalize the Reports and present the same to both the Houses of Parliament.

8.	***	***	***	***	***	***	***
9.	***	***	***	***	***	***	***

The Committee then adjourned.

#### APPENDIX II

(Vide Introduction of Report)

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

(i) Total number of Recommendations:—

11

- (ii) Recommendations/Observations which have been accepted by the Government:—
  - Sl. Nos. 1, 2, 4, 5, 8, 10 and 11

Total: 07

Percentage: 64

(iii) Recommendations/Observations which the Committee do not desire to pursue in view of the Government's replies:—

Sl. No. 9

Total: 01

Percentage: 09

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

Sl. Nos. 3, 6 and 7

Total: 03

Percentage: 27

(v) Recommendations/Observations in respect of which final replies of the Government are still awaited:—

Sl. No. Nil

Total: 00

Percentage: 00