

24

**STANDING COMMITTEE  
ON ENERGY  
(2007-2008)**

**FOURTEENTH LOK SABHA**

**MINISTRY OF NEW AND RENEWABLE ENERGY**

*(Action Taken on the recommendations contained in the Nineteenth Report (14<sup>th</sup> Lok Sabha) on Demands for Grants of the Ministry of New and Renewable Energy for the year 2007-2008)*

**TWENTY- FOURTH REPORT**



**LOK SABHA SECRETARIAT  
NEW DELHI**

***November, 2007/Agrahayana, 1929 (Saka)***



**STANDING COMMITTEE ON ENERGY  
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*(Action Taken on the recommendations contained in the Nineteenth Report (14<sup>th</sup> Lok Sabha) on Demands for Grants of the Ministry of New and Renewable Energy for the year 2007-2008)*

*Presented to Lok Sabha on 1.12.2007*

*Laid in Rajya Sabha on 1.12.2007*



**LOK SABHA SECRETARIAT  
NEW DELHI**

***November, 2007/Agrahayana, 1929 (Saka)***

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## COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2007-08)

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1. Shri P.K. Bhandari - Joint Secretary
2. Shri J.S.Chauhan - Deputy Secretary
3. Smt. Juby Amar - Under Secretary
4. Shri Manoj Pahuja - Executive Assistant

(iii)

## INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this 24<sup>th</sup> Report (Fourteenth Lok Sabha) on the action taken by the Government on the recommendations contained in the 19<sup>th</sup> Report of the Standing Committee on Energy on Demands for Grants (2007-2008) of the Ministry of New and Renewable Energy.

2. The 19<sup>th</sup> Report of the Standing Committee on Energy was presented to Lok Sabha on 27<sup>th</sup> April, 2007. Replies of the Government to all the recommendations contained in the Report were received on 16<sup>th</sup> October, 2007.

3. The Standing Committee on Energy considered and adopted this Report at their sitting held on 29<sup>th</sup> November, 2007.

4. An Analysis on the Action Taken by the Government on the recommendation contained in the 19<sup>th</sup> Report of the Committee is given at Annexure-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;**  
**29 November, 2007**  
**Agrahayana 8, 1929 (Saka)**

**GURUDAS KAMAT,**  
**Chairman,**  
**Standing Committee on Energy**

## CHAPTER-I

### Report

This Report of the Committee deals with the Action Taken by the Government on the recommendations contained in the Nineteenth Report (14<sup>th</sup> Lok Sabha) of the Standing Committee on Energy on Demands for Grants of the Ministry of New and Renewable Energy for the year 2007-08.

2. The Nineteenth Report was presented to Lok Sabha on 27.04.2007 and was laid on the Table of Rajya Sabha on the same day. It contained 18 Recommendations/Observations.

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

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

SI No.1, 3, 6, 10, 12, 13, 15, 16 and 17

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

SI No. 4, 7 and 14

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

SI No.2, 5, 8, 9, 11 and 18

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

SI No. Nil

**4. The Committee desire that utmost importance should be given to the implementation of recommendations accepted by the Government. In cases, where it is not possible for the Government to implement the recommendations in letter and spirit for any reasons, the matter should be reported to the Committee in time along with reasons for their non-implementation.**

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

## **A. Utilisation of Allocated Funds**

### **Recommendation (Sl. No. 2 Para No. 1.13)**

6. The Committee noted that the main reasons specified by the Ministry for a lower actual expenditure during the year were on account of the fact that progress in incurring expenditure in the Remote Village Electrification Programme started suffering from 2003-04 onwards, when Finance Ministry raised the issue that Cabinet approval had not been taken without taking cognizance of the fact that the resolution under which the Commission for Additional Sources of Energy (CASE) was formed, clearly spelt out that this Commission had both appraisal and approval power within the allocated budget. Similarly, problems were faced with programmes whose 10<sup>th</sup> Plan outlay exceeded Rs.50 crore. As per the subsidy scheme also for small hydro, biomass, bagase cogeneration etc., the subsidy could not be released. Another reasons specified by the Ministry for non-utilisation of the funds was that REC (Rural Electrification Corporation), the implementing agency for RGGVY had been unable to furnish lists of remote villages and hamlets until late 2006-07. The Ministry had further informed that R&D appraisal mechanism could be put in place only in December 2006, because the entire issue of R&D had to be re-examined due to certain reasons.

7. The Ministry in its action taken reply has stated:

“It is submitted that the issues relating to RVE programme are of an ongoing nature and keep getting addressed as they crop up. Approval for continuation of the Programme during the 10<sup>th</sup> Plan period was duly obtained. The process of identification of remote villages by REC has been further streamlined and around 8700 remote villages and hamlets have been identified by them so far. States have been advised to expedite preparation of proposals for these villages for consideration of this Ministry.”

**8. The Committee are not at all satisfied with the reply of the Ministry.**

**The Ministry has not explained the reasons for non-release of subsidy for small hydro, biomass, bagase cogeneration, etc. The reasons given by the**



**Ministry for low expenditure during the year speak volumes of the lack of perspective planning by the Government.**

**9. The Committee have noted that at last around 8700 remote villages and hamlets have been identified by the REC under RGGVY and the State Governments have been advised to expedite preparation of proposals for these villages. The Committee hope that the Ministry will now assign top priority to this matter and through persistent follow-up ensure that not only are the proposals expedited by the State Governments but REC also takes care of the execution part without any delay. The Committee expect that the Ministry will go all out for completion of electrification in all respects in these 8700 villages and hamlets during the current financial year.**

**10. The Committee further desire that proper planning be done by the Government regarding proper implementation of various schemes & programmes so that the allocated funds do not remain unutilized.**

## **B. Development of Small Hydel Power Projects**

### **Recommendation (Sl. No. 5 Para No. 1.16)**

11. The Committee were of the view that the Ministry should lay special emphasis on development of small hydel power projects in the North-East and Himachal Pradesh etc. where a lot of potential exists. Small hydel power projects does not involve a lot of displacement of people or disturb the eco – system of the area and could be developed in a short time. The Ministry should carry out techno-economic feasibility study to identify small hydel potential in various States on canals like projects on Indira Gandhi Canal in Rajasthan, Punjab and Haryana.

12. The Ministry in its action taken reply has stated:

“Under the Small Hydro Power (SHP) Programme of the Ministry, States that desire to carry out further survey and investigations of newer SHP sites and prepare a master plan for the development of the sector can do so for which purpose upto Rs.30 lakh is provided. Furthermore, the level of subsidy provision for special category states that include north-east region and Himachal Pradesh is on the higher side. Investment in NER is not forthcoming commensurate with potential on account of lack of investor confidence.”

**13. The Committee have noted that the Ministry provides fund upto Rs.30 lakh to the States, which desire to carry out further survey and investigation of newer SHP sites and preparation of master plan for the development of this sector. However, it appears that mere financial incentive is not sufficient to prop up this core sector. The Committee feel that the Ministry should play a more proactive role in this matter. One of the alternatives could be getting a national survey of prospective small hydro projects sites done suo-moto by the Government. The Ministry can,**

thereafter, based on this holistic perspective plan take up the matter with the concerned State Government.

14. As regards the lack of investment in the NE Region due to poor investor confidence, the Committee feel that the Ministry should go all out in coordination with Union Home Ministry and the State Governments to ensure a pro-investor climate in the Region in view of its tremendous potential for power generation through SHP particularly focusing the law and order situation as expenditure on security adds up to the cost of project making it unviable.

### **C. Incentives for wind power generation**

#### **Recommendation (Sl. No. 8 Para No. 2.14)**

15. While observing that 80% accelerated depreciation along with concessional duties and tax holidays for 10 years on profits earned are available to the wind power generators in the country to encourage private participation, the Committee had noted that there was no direct co-relation between the capacity installation of wind power and the number of units generated. In this context, the Committee had desired that though incentives and tax holidays were needed to be continued in the wind energy sector, but at the same time these should have been linked to the actual generation of power and its utilisation as grid interactive power or as power for local use in villages and hamlets near the actual sites. The Committee had recommended for devising a mechanism to monitor the incentives along with the actual production and utilization of wind power at the tail end.

16. The Ministry in its action taken reply has stated:

“While ideally linking incentives to output, i.e., generation appears desirable, the same requires not only a high level of monitoring but also the need to keep accounts for a fairly substantial length of time, leading thereby to manifold increase in paper work and requirement of manpower to administer such a scheme. Notwithstanding this drawback, a case is being made out for production-linked incentives in lieu of accelerated depreciation benefit for wind power. In cases where capital subsidy is being provided such as small hydro power and bio-power the same is linked to attainment of the larger objective of deployment of quality equipment that conforms to IEC standards or equivalent national standards, where available. Hence, such targeted capital subsidy is also required as it serves a purpose.”

**17. The Committee observe that the Ministry has accepted the recommendation of the Committee but have expressed a lot of procedural apprehensions in effective implementation thereof. While expressing their satisfaction over the submission of the Ministry that a case was being made out for production linked incentives in lieu of accelerated**

depreciation benefit for wind power, the Committee observe that the Ministry should overcome all procedural and administrative embargo to achieve the desired level of result in this regard in the near future. The Committee would like to again emphasize that the tax holidays and other incentives in the wind power generation sector must be linked with the actual generation of power and its utilization and for this purpose a suitable monitoring mechanism must be evolved. The Committee trust that the Ministry will come forward with a concrete proposal to effectively implement their recommendations.

#### **D. R&D in the field of Wind Energy**

##### **Recommendation Sl. No. 9 Para No. 2.15)**

18. The Committee also note that in the past very meagre allocations had been made for R&D sector and even then the Ministry has been unable to use all its funds for R&D and other related programmes of wind energy. As there is an urgent need to tap the wind resources in the low wind regimes, the Committee desire that there is a long pending requirement to undertake more and more R&D activities and develop WEGS for low wind regimes so that the available wind energy potential in the country can be tapped successfully to the fullest extent. The Ministry should also explore the possibility of getting wind technology from abroad and also study the different types of wind zones existing in India.

19. The Ministry in its action taken reply has stated:

“At the outset, it is submitted that because of excellent wind regime prevalent in most parts of North America and Northern Europe, their current design for Wind Electric Generators (WEGs) is optimized for performance at wind powerdensity greater than 300 W/m<sup>2</sup> at 50 m hub height. Accordingly Europeans, who have been the leaders in WEG design, have not focused attention on the development and manufacture of WEGs for wind regimes less than 300 W/m<sup>2</sup> at 50 m hub height so far. The USDOE, it is learnt, has sponsored a project for design and development of WEGs for low wind regimes. Under the Indo-US Energy Dialogue an offer has been made to the US side to involve this country in the said project but no favourable response has been received to-date despite several initiatives from our end. Alongside, C-WET has been asked to go ahead with the design and development of such WEGs in collaboration or otherwise with other research institutions and corporates in the field. It might be mentioned that the WEGs manufactured in the country are based on licensed design, except in the case of Suzlon which has its own design offices within and outside the country.”

**20. The Committee note that due to excellent wind regime prevalent in most parts of North America and Northern Europe, the countries in these regions have optimized greater power density technologies. These are**

unfortunately not suitable to our low wind regime situations. It is understood that the US Deptt. of Energy has sponsored a project for design and development of Wind Electric Generators (WEGs) for low wind regimes, however, the efforts made by the Ministry till date to get India involved in this project have yielded no results.

21. Apart from these offshore initiatives the Ministry has also asked C-WET to go ahead with the design and development of such WEGs either in collaboration or otherwise with other R&D institutions and corporates in the field. In view of the immense importance of wind energy, it is but imperative that WEGs suitable to the low wind regimes prevalent in India be acquired/developed indigenously. To this end the Committee would like the Government to take up the matter regarding involving India in the US Deptt. of Energy sponsored project, at the highest levels.

22. Apart from tapping this offshore source, the Committee would also emphasise on development of WEGs indigenously at the earliest. For this purpose they would expect the Ministry to render all possible facilities and assistance to C-WET so that their efforts in developing WEGs suitable to our requirements do not suffer from any administrative or financial constraints. The Committee would like the Ministry to work out a clearly laid out road map in consultation with C-WET for the purpose and would like to be apprised about the same at the earliest.

## **E. Implementation of Rural Electrification Programmes**

### **Recommendation (Sl. No. 11 Para No. 2.24)**

23. The Committee took note of the fact that a large amount of work was to be undertaken for remote village lighting, village energy security test projects, biogas projects, etc. in the 11<sup>th</sup> Plan period. The Committee desired that adequate funds might be made available for these small yet significant rural programmes so that the population living in rural areas could take maximum benefit of the programmes and schemes initiated by the Ministry of New and Renewable Energy.

24. The Ministry in its action taken reply has stated:

“The recommendation is noted.”

**25. The Committee are highly dissatisfied with the reply of the Ministry in the instant case. Merely noting the recommendation of the Committee will not suffice. The remote village lighting, village energy security test projects and biogas projects are small yet significant minimum requirement of the rural areas, which deserve far more than a non-chalant response from the nodal Ministry.**

**26. The Committee in their recommendation had desired that adequate funds may be made available for remote village lighting, village energy security test projects, biogas projects, etc., during 11<sup>th</sup> Plan. The Committee reiterate their earlier recommendation and desire that the Ministry should ensure through proper monitoring that the 11<sup>th</sup> Plan allocation for these programmes/schemes is fully utilized for the benefit of the people living in rural areas.**



**F. R&D in the field of Solar Power Generation**

**Recommendation (Sl. No. 18 Para No. 2.50)**

27. The Committee note that R&D activity in this country as well as globally aim to make solar power more competitive in the near future. An amount of Rs.400 crore has been proposed in the solar R&D in the 11<sup>th</sup> Plan which has the aim of making the Solar Energy Centre an Institution of excellence. The Committee desire that a time schedule should be drawn up to carry forward the research in identified areas in this field so that it can be made economically viable and made use of at mass level. The Committee desire that the latest technology in the field of R&D should be adopted so that there is cost effectiveness by increasing the number of users. The Committee also desire that various IITs and other scientific institutions should also be asked to take up research work in the solar energy field.

28. The Ministry in its action taken reply has stated:

“The recommendation is noted.”

**29. The Committee are unhappy about this totally incomplete response of the Ministry. The Ministry was supposed to take concrete steps for fructification of the suggestions contained in this Report and inform the Committee about the same. Earmarking a sum of Rs.400 crore, which is by no means a small amount to SEC for R&D efforts in Solar Energy Sector ought to have been accompanied by a clearly laid down plan of likely core areas and targets so that achievements would have been accordingly calibrated.**

**30. The Committee would, therefore, like to have a more detailed and specific response from the Ministry than its present inane one. The Committee would also like to be apprised about the measures being proposed by the Ministry to make Solar Energy Centre (SEC) an Institution**

**of Excellence. The Committee further desire to know whether any IIT and other scientific institution have been approached by the Ministry to take up research work in the field of Solar Energy and what has been the response.**

## **CHAPTER - II**

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

#### **Recommendation (SI No. 1 Para No. 1.12)**

The Committee are concerned to note that there has been a downward trend in the utilisation of funds by the Ministry of New and Renewable Energy from the year 2003-04 onwards. Similarly, there has been a trend of cutting the budget of the Ministry by the Ministry of Finance at RE stage from the year 2003-04 onwards. Last year also a similar trend was noticed in the expenditure of the Ministry. Against a BE of Rs.603.64 crore, the RE for same year stood at Rs.386.57 crore. The actual expenditure up to February 2007 as informed by the Ministry was Rs.255.32 crore. The Committee note that the Ministry failed to make adequate expenditure in the first and second quarter of the financial year (Rs.36.72 crore and Rs.4.42 crore) resulting in a cut at the RE stage.

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

It is submitted that R.E. of Rs. 386.57 crore during 2006-07 was fully utilized. During 2007-08 an amount of Rs.114.81 crore has already been utilized during the first two quarters, i.e., April– September 2007.

**[Ministry's O.M. No. 8/1/2007-P&C dated 12.10.2007]**

#### **Recommendation (SI. No. 3 Para No. 1.14)**

The Committee, however, feel that the Ministry has taken too long a period to resolve various problems which are only administrative in nature. The Committee, therefore, desire that such problems should be attended to within the financial year in which these are encountered. The Committee hope that the expenditure position would improve in the year 2007-08 as the obstacles encountered in the clearance and approval of schemes by way of dismantling of CASE and direct financial approval at the appropriate level by the Ministry of Finance would prove an effective method to check expenditure and streamline the procedures. The Committee feel that the rationalisation and simplification of the programmes / schemes for the 11<sup>th</sup> Plan commencing 2007-08 would help the Ministry in achieving both physical and financial targets. The Committee also hope that expenditure position would also improve by deputation of a zonal officer in each State to facilitate processing of schemes and zonal meetings to be chaired by Secretary, MNRE introduced in 2006-07 to be made more periodic. The Committee hope that they will be able to utilise all the funds allocated to the Ministry judiciously and expeditiously in the year 2007-08.

### **Reply of the Government**

The expenditure during the first two quarters of 2007-08 is Rs.114.81 crore. Further efforts are being made to utilize the entire BE provision for the year.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

### **Recommendation (SI. No. 6 Para No. 1.17)**

At the same time the Committee desire that other areas should not be totally neglected. The Committee desire that research and development in all the areas should be continued to be done. The Government should provide 100% subsidy for R&D activities and the Ministry should ensure that the amount allocated is fully utilised in identified key areas where research is required. The Committee also desire that more research needs to be carried out on tidal projects.

### **Reply of the Government**

During 11<sup>th</sup> Plan, Rs.1500 crore has been proposed for Research, Design and Development in New and Renewable Energy. Under the existing scheme, corporate R&D can be supported upto the level of 50 per cent while that carried out in universities, national labs, etc. is eligible for upto 90 per cent support.

The major R&D activities to be undertaken during the 11<sup>th</sup> Plan are:

- (i) Bio-energy, including Bio-fuels
- (ii) Hydrogen & Fuel Cells
- (iii) Raising efficiency and lowering costs of Solar Photovoltaic cells
- (iv) Raising efficiency and lowering costs of Solar Thermal Energy systems / devices
- (v) Wind Electric Generator Systems for low wind regime
- (vi) Small Hydro Power
- (vii) Geothermal Energy
- (viii) Tidal Energy

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

### **Recommendation (SI No. 10 Para No. 2.23)**

The Committee note that the responsibility for identification of villages and hamlets which are not to receive grid connectivity under RGGVY has been entrusted to the Rural Electrification Corporation (REC). The REC as so far identified 7496 villages / hamlets through some are disputed by some State Governments. The Committee feel that in view of the above no head way appears to have been made in the Rural Electrification Programmes. The

Ministry of New and Renewable Energy rather than relying totally on REC for identification of villages and hamlets which are not to receive grid connectivity under RGGVY, should take up some sort of survey work of their own to identify potential villages to be electrified through renewable energy. The Committee, therefore, desire that the Ministry must take effective steps for identification of inaccessible areas for electrification by renewable energy. The Committee desire that apart from meeting the needs of home lighting systems under this scheme, all out efforts should be made to meet the other energy needs of such villages like cooking and motive power through locally available resources.

### **Reply of the Government**

It is submitted that the subject of rural electrification has been allocated to the Ministry of Power (MoP) who have accordingly been charged with the responsibility for providing grid access in rural areas through RGGVY. This Ministry, therefore, cannot duplicate the efforts of MoP or its agencies like REC to determine as to which of the villages would receive grid-connectivity or not. It is only after REC takes a decision not to provide grid access to a particular village or hamlet that the same is communicated to this Ministry. It might be mentioned that in some cases states are contesting REC's decisions not to provide grid-access, thereby complicating the process of provision of renewable energy options to remote villages. As far as provision of biogas plants for remote villages is concerned, the same has been noted. It is submitted that till such time as bio-fuels prove their technical viability and cost-effectiveness for motive power, it may not be possible to take up any major programme in this regard.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

### **Recommendation (Sl. No. 12 Para No. 2.25)**

The Committee note that work has been commenced on test projects in remote villages and hamlets to meet their energy needs. The first test project has been commissioned at Kasai village, Batual district Madhya Pradesh on October 2005. The Committee desire that such projects should be started in these villages in a time bound manner for which a schedule should be drawn up. The Committee should be informed of the same. The Committee desire that a detailed study should be made as to how many systems were installed during the last three years and how many are functional. The targets relating to the same should be fixed so that work is executed timely.

### **Reply of the Government**

81 test projects have so far been taken up in 11 States, of which 8 have been commissioned so far. Another 50 projects are proposed to be taken up during 2007-08 and 70 projects during 2008-09. As regards evaluation of functionality of the systems, the Ministry has initiated action to conduct detailed

evaluation/ impact study of all its major programmes, including the test projects on village energy security, during the current year.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

### **Recommendation (Sl. No. 13 Para No. 2.37)**

The Committee note that the Biomass Power and Co-generation Programme of the Ministry is being implemented since last few years. However, there has been a gap between the physical and financial targets of the programme. The Committee are unhappy to note that the physical and financial targets under the programme had not been achieved during various years of the 10<sup>th</sup> Five Year Plan due to cancellation of some PPAs. The Committee also note that the developers of biomass power face certain problems like non-assessment of surplus biomass, interrupted supplies of biomass, especially during monsoons, steep price variations in supply, technical and operational problems and uncertainty associated with tariffs fixation in some potential States.

### **Reply of the Government**

It is submitted that as against a target of 700 MW for the 10<sup>th</sup> Plan for Biomass Combustion/Bagasse Cogeneration Programme, the actual achievement is 758 MW which has been achieved by incurring a lesser expenditure of Rs. 59.69 crore against a BE/RE of Rs. 141.22/Rs 100.92 crore.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

### **Recommendation (Sl. No. 15 Para No. 2.39)**

The Committee also desire that R&D efforts should be stepped up to improve biomass gasification technologies to give a better result in power generation. A time schedule should be fixed to complete the identified projects so that this sector can be made more commercially viable and huge potential can be tapped. The Committee also desire that R&D should be related to standardisation of machines, their maintenance, working and on the whole the institutional set up required to ensure working of the various systems under biomass gasification programme.

### **Reply of the Government**

The identified thrust areas for R&D in Biomass gasification have been placed on this Ministry's website: <http://www.mnre.nic.in> and research proposals have been solicited. Projects relating to standards for equipment and institutional

mechanisms for ensuring regular maintenance of the systems are receiving focused attention of the Ministry.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

**Recommendation (Sl. No. 16 Para No. 2.40)**

The Government should also examine as to how far various incentives have been able to attract the private investment in this sector. The Committee desire that these incentives should be linked with actual generation of power and not merely on creation of infrastructure etc.

**Reply of the Government**

As already submitted in reply to recommendation at Sl. No.8, a case is being made out for grant of production linked incentives for wind power and in cases where capital subsidy is being provided such as small hydro power and bio power, the same is being linked to attainment of the larger objective of deployment of quality equipment that conforms to IEC standards or equivalent national standards, where available. Hence, such targeted capital subsidy is also required as it serves a purpose.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

**Recommendation (Sl. No. 17 Para No. 2.49)**

The Committee note that the Solar Energy Programme of the Ministry during the 10<sup>th</sup> Plan period was to facilitate (i) R&D on solar energy materials (ii) deployment of solar energy systems for supplementing heat requirements and (iii) limited demonstration for extension purpose of SPV systems and devices. The Committee note that have been huge variations in physical and financial targets and actual expenditure has been lower than the Budget Estimates and Revised Estimates. Even in the R&D a substantially lower amount had been spent on the solar energy research front. Not much appears to have been done in reducing the cost of solar power. The Committee desire that time bound targets should be fixed to put up solar street lights, traffic signals and other eco-logical friendly devices in the 11<sup>th</sup> Plan.

**Reply of the Government**

It is submitted that RD&D focus during the 11<sup>th</sup> Plan is on the development of silicon and other materials, cost-efficient solar cells, thin film materials, concentrating PV technology, PV system design with the objective of significantly reducing the ratio of capital cost to conversion efficiency for which an outlay of

Rs.220 crore has been proposed. A budget provision of Rs.250 crore has further been proposed for support to SPV and other renewable energy devices under the extension component of the Information, Publicity and Extension Programme during the 11<sup>th</sup> Plan.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**



## **CHAPTER – III**

### **RECOMMENDATIONS/OBSRVATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PERSUE IN VIEW OF THE GOVERNMENT'S REPLIES**

#### **Recommendation (Sl. No. 4 Para No. 1.15)**

The Committee further desire that while developing various sources of new and renewable energy, cost effectiveness of the source should be kept in mind by making a cost-benefit analysis. For example, with an investment of 36 crore, 1.5 lakh of family type Biogas plants can be provided. So the basic idea should be to add maximum MW at least cost.

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

The endeavor is that the unit cost of generation of renewable power / energy is cost competitive and this cannot be measured in terms of capacity addition / unit investment alone without taking into account annual capacity utilization factor, safety aspects, convenience of supply, etc.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

#### **Recommendation (Sl. No. 7 Para No. 2.13)**

The Committee note that the potential for wind power generation for both grid and off grid applications was estimated at about 45000 MW taking sites having wind power density greater than 200 W/Sq m at 50 m hub height assuming land availability in potential areas @ 1% and the requirement of setting up wind farms @ 12 ha/MW. The Committee also note that two-thirds of the wind potential lies in areas having a very modest wind regime. The wind capacity installed up to 31.01.2007 is 6315 MW only.

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

The wind power generation installed capacity up to 31.3.2007 is 7093 MW. An additional capacity of 1500 MW has been planned for 2007-08. As noted by the Committee, harnessing of wind power potential between 200-300 W/m<sup>2</sup> at 50 m hub height (Class-II) would require development and deployment of Wind Electric Generators (WEGs) that make generation cost effective in such low wind regimes.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

### **Recommendation (Sl. No. 14 Para No. 2.38)**

The Committee desire that these problems should be resolved in consultation with private developers and if necessary, with the State Governments as well so that private investment can come in this sector. The Committee further note that a Biomass Resource Atlas for India has been prepared for surplus agro residues which has been placed on the website of the Indian Institute of Science, Bangalore, which is expected to address the issue of firmly assessing surplus agro residue availability. The Committee have also been informed that the thrust areas for R&D support on biomass power / co-generation and gasification have been identified and an increased allocation has been made for the same.

### **Reply of the Government**

Work on the National Biomass Resources Atlas has been completed on 31.07.2007 and the same has been hosted on IISc website: <http://www.lab.cgpliisc.ernet.in>. The thrust areas identified for R&D support in biomass power, co-generation and gasification have been placed on this Ministry's website: <http://www.mnre.nic.in>. An increased allocation of Rs. 5.00 crore has been made in B.E. 2007-08 for R&D activities in Bio-Energy.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

## **CHAPTER – IV**

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

#### **Recommendation (Sl. No. 2 Para No. 1.13)**

The Committee note that the main reasons specified by the Ministry for a lower actual expenditure during the year were on account of the fact that progress in incurring expenditure in the Remote Village Electrification Programme started suffering from 2003-04 onwards, when Finance Ministry raised the issue that Cabinet approval had not been taken without taking cognizance of the fact that the resolution under which the Commission for Additional Sources of Energy (CASE) was formed, clearly spelt out that this Commission had both appraisal and approval power within the allocated budget. Similarly, problems were faced with programmes whose 10<sup>th</sup> Plan outlay exceeded Rs.50 crore. As per the subsidy scheme also for small hydro, biomass, bagase cogeneration etc., the subsidy could not be released. Another reasons specified by the Ministry for non-utilisation of the funds was that REC (Rural Electrification Corporation), the implementing agency for RGGVY had been unable to furnish lists of remote villages and hamlets until late 2006-07. The Ministry has further informed that R&D appraisal mechanism could be put in place only in December 2006, because the entire issue of R&D had to be re-examined due to certain reasons.

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

It is submitted that the issues relating to RVE programme are of an ongoing nature and keep getting addressed as they crop up. Approval for continuation of the Programme during the 10<sup>th</sup> Plan period was duly obtained. The process of identification of remote villages by REC has been further streamlined and around 8700 remote villages and hamlets have been identified by them so far. States have been advised to expedite preparation of proposals for these villages for consideration of this Ministry.

**[Ministry's O.M. No. 8/1/2007-P&C dated 12.10.2007]**

#### **Comments of the Committee**

Please see Para Nos. 8, 9 and 10 of Chapter – I of the Report

#### **Recommendation (Sl. No. 5 Para No. 1.16)**

The Committee are also of the view that the Ministry should lay special emphasis on development of small hydel power projects in the North-East and Himachal Pradesh etc. where a lot of potential exists. Small hydel power projects do not involve a lot of displacement of people or disturb the eco – system of the area and can be developed in a short time. The Ministry should carry out techno-economic feasibility study to identify small hydel potential in various States on canals like projects on Indira Gandhi Canal in Rajasthan, Punjab and Haryana.

### **Reply of the Government**

Under the Small Hydro Power (SHP) Programme of the Ministry, States that desire to carry out further survey and investigations of newer SHP sites and prepare a master plan for the development of the sector can do so for which purpose upto Rs.30 lakh is provided. Furthermore, the level of subsidy provision for special category states that include north-east region and Himachal Pradesh is on the higher side. Investment in NER is not forthcoming commensurate with potential on account of lack of investor confidence.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

### **Comments of the Committee**

Please see Para Nos. 13 and 14 of Chapter – I of the Report

### **Recommendation (Sl. No. 8 Para No. 2.14)**

The Committee are unhappy to note poor utilisation of funds during the 10<sup>th</sup> Plan period. This has led the Ministry of Finance to reduce their budget every year at RE stage. The Committee consider it a very serious matter and desire that immediate corrective steps should be taken to ensure that in future all allocations are fully utilised. The Committee also note that 80% accelerated depreciation along with concessional duties and tax holidays for 10 years on profits earned are available to the wind power generators in the country to encourage private participation. However, the Committee are surprised to note that there is no direct co-relation between the capacity installation of wind power and the number of units generated. The Committee feel that although incentives and tax holidays need to be continued in the wind energy sector, however, these should be linked to the actual generation of power and its utilisation as grid interactive power or as power for local use in villages and hamlets near the actual sites. The Committee recommend that the Government needs to devise a mechanism to monitor the incentives along with the actual production and utilization of wind power at the tail end. The Committee should be kept informed about the action taken in the matter.

## **Reply of the Government**

While ideally linking incentives to output, i.e., generation appears desirable, the same requires not only a high level of monitoring but also the need to keep accounts for a fairly substantial length of time, leading thereby to manifold increase in paper work and requirement of manpower to administer such a scheme. Notwithstanding this drawback, a case is being made out for production-linked incentives in lieu of accelerated depreciation benefit for wind power. In cases where capital subsidy is being provided such as small hydro power and bio-power the same is linked to attainment of the larger objective of deployment of quality equipment that conforms to IEC standards or equivalent national standards, where available. Hence, such targeted capital subsidy is also required as it serves a purpose.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

### **Comments of the Committee**

Please see Para No. 17 of Chapter – I of the Report

### **Recommendation SI. No. 9 Para No. 2.15)**

The Committee also note that in the past very meagre allocations had been made for R&D sector and even then the Ministry has been unable to use all its funds for R&D and other related programmes of wind energy. As there is an urgent need to tap the wind resources in the low wind regimes, the Committee desire that there is a long pending requirement to undertake more and more R&D activities and develop WEGS for low wind regimes so that the available wind energy potential in the country can be tapped successfully to the fullest extent. The Ministry should also explore the possibility of getting wind technology from abroad and also study the different types of wind zones existing in India.

## **Reply of the Government**

At the outset, it is submitted that because of excellent wind regime prevalent in most parts of North America and Northern Europe, their current design for WEGs is optimized for performance at wind power density greater than  $300 \text{ W/m}^2$  at 50 m hub height. Accordingly Europeans, who have been the leaders in WEG design, have not focused attention on the development and manufacture of WEGs for wind regimes less than  $300 \text{ W/m}^2$  at 50 m hub height so far. The USDOE, it is learnt, has sponsored a project for design and development of WEGs for low wind regimes. Under the Indo-US Energy Dialogue an offer has been made to the US side to involve this country in the said project but no favourable response has been received to-date despite several initiatives from our end. Alongside, C-WET has been asked to go ahead with the design and development of such WEGs in collaboration or otherwise with other research institutions and corporates in the field. It might be mentioned that the WEGs

manufactured in the country are based on licensed design, except in the case of Suzlon which has its own design offices within and outside the country.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

**Comments of the Committee**

Please see Para Nos. 20, 21 and 22 of Chapter – I of the Report

**Recommendation (Sl. No. 11 Para No. 2.24)**

The Committee take note of the fact that a large amount of work is to be undertaken for remote village lighting, village energy security test projects, biogas projects, etc. in the 11<sup>th</sup> Plan period. The Committee desire that adequate funds may be made available for these small yet significant rural programmes so that the population living in rural areas can take maximum benefit of the programmes and schemes initiated by the Ministry of New and Renewable Energy.

**Reply of the Government**

The recommendation is noted.

**[Ministry O.M.No. 8/1/2007-P&C dated 12.10.2007]**

**Comments of the Committee**

Please see Para Nos. 25 and 26 of Chapter – I of the Report

**Recommendation (Sl. No. 18 Para No. 2.50)**

The Committee note that R&D activity in this country as well as globally aim to make solar power more competitive in the near future. An amount of Rs.400 crore has been proposed in the solar R&D in the 11<sup>th</sup> Plan which has the aim of making the Solar Energy Centre an Institution of excellence. The Committee desire that a time schedule should be drawn up to carry forward the research in identified areas in this field so that it can be made economically viable and made use of at mass level. The Committee desire that the latest technology in the field of R&D should be adopted so that there is cost effectiveness by increasing the number of users. The Committee also desire that various IITs and other scientific institutions should also be asked to take up research work in the solar energy field.

## **Reply of the Government**

The recommendation is noted.

**[Ministry's O.M.No. 8/1/2007-P&C dated 12.10.2007]**

### **Comments of the Committee**

Please see Para Nos. 29 and 30 of Chapter – I of the Report

**CHAPTER – V**

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

Nil

**NEW DELHI;**  
**29 November, 2007**  
**Agrahayana 08, 1929 (Saka)**

**GURUDAS KAMAT,**  
**Chairman,**  
**Standing Committee on Energy**



**MINUTES OF THE 4<sup>th</sup> SITTING OF THE STANDING COMMITTEE ON ENERGY (2007-08) HELD ON 29<sup>th</sup> NOVEMBER, 2007 IN ROOM No. 134, PARLIAMENT HOUSE ANNEXE, NEW DELHI.**

The Committee met from 1500 hours to 1530 hours.

**PRESENT**

**Shri Gurudas Kamat** - **Chairman**

**MEMBERS**

**Lok Sabha**

2. Sardar Sukhdev Singh Libra
3. Dr. Ravindra Kumar Rana
4. Shri Kiren Rijiju
5. Shri M.K.Subba

**Rajya Sabha**

6. Shri Bimal Jalan
7. Dr. K. Kasturirangan
8. Shri Syed Azeez Pasha
9. Shri Motilal Vora
10. Shri Veer Pal Singh Yadav

**SECRETARIAT**

1. Shri P.K. Bhandari, Joint Secretary
2. Shri J.S. Chauhan, Deputy Secretary
3. Shri Shiv Kumar, Deputy Secretary
4. Smt. Juby Amar, Under Secretary

At the outset, the Chairman welcomed the Members to the sitting of the Committee. The Committee then took up for consideration the Draft Twenty-fourth Report on Action Taken on the recommendations contained in the 19<sup>th</sup> Report of the Standing Committee on Energy on Demands for Grants of the Ministry of New and Renewable Energy for the year 2007-08.

2. The Committee then adopted the draft Report without any modification.
3. The Committee also authorized the Chairman to finalise the Report and to present/lay the same to both the Houses of Parliament.

*The Committee then adjourned.*

**Appendix – II**  
(Vide Introduction of Report)

ANALYSIS OF ACTION TAKEN BY GOVERNMENT ON THE TWENTY-  
FOURTH REPORT OF STANDING COMMITTEE ON ENERGY (14<sup>TH</sup> LOK  
SABHA)

|       |   |             |
|-------|---|-------------|
| (i)   | Total number of Recommendations   | 18          |
| (ii)  | Recommendations/Observations which have been accepted by the Government:  |             |
|       | SI No. 1, 3, 6, 10, 12, 13, 15, 16 and 17   | Total : 9   |
|       | Percentage  | 50%         |
| (iii) | Recommendations/Observations which the Committee do not desire to pursue in view of the Government's replies:   |             |
|       | SI No. 4, 7 and 14  | Total : 3   |
|       | Percentage  | 17%         |
| (iv)  | Recommendations/Observations in respect of which the replies of the Government have not been accepted by the Committee and which require reiteration: |             |
|       | SI No. 2, 5, 8, 9, 11 and 18  | Total : 6   |
|       | Percentage  | 33%         |
| (v)   | Recommendations/Observations in respect of which the final replies of the Government are still awaited:   |             |
|       | SI No. Nil  | Total : Nil |
|       | Percentage  | 0%          |