

28

**STANDING COMMITTEE
ON ENERGY
(2008-2009)**

FOURTEENTH LOK SABHA

MINISTRY OF NEW AND RENEWABLE ENERGY

*[Action taken on the recommendations contained in the Twenty-sixth Report
(14th Lok Sabha) on Demands for Grants of the Ministry of
New and Renewable Energy for the year 2008-2009]*

TWENTY-EIGHTH REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

January, 2009/Magha, 1930 (Saka)



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COMPOSITION OF THE STANDING COMMITTEE ON ENERGY
(2008-2009)

Shri Gurudas Kamat — *Chairman*

MEMBERS

Lok Sabha

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- ** 3. Smt. Susmita Bauri
4. Shri Nandkumar Singh Chauhan
5. Smt. Anuradha Choudhary
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14. Shri Vijayendra Pal Singh
15. Shri M.K. Subba
16. Shri E.G. Sugavanam
- * 17. Shri Tarit Baran Topdar

* Nominated as Member of the Committee *w.e.f.* 18.12.2008.

** Re-nominated as Member of the Committee *w.e.f.* 9.1.2009.

18. Shri G. Venkatswamy
19. Shri Chandra Pal Singh Yadav
20. Shri Kailash Nath Singh Yadav
21. Vacant

Rajya Sabha

22. Shri Shyamal Chakraborty
23. Dr. Bimal Jalan
24. Shri Prakash Javadekar
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- *** 26. Shri Anil H. Lad
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28. Shri V. Hanumantha Rao
29. Shri Jesudasu Seelam
30. Shri Shivpratap Singh
31. Shri Veer Pal Singh Yadav

SECRETARIAT

1. Shri Ashok Sarin — *Joint Secretary*
2. Shri Shiv Kumar — *Deputy Secretary*
3. Shri Manoj Pahuja — *Sr. Exe. Assistant*

*** Nominated *w.e.f.* 15th January, 2009.

INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this 28th Report (Fourteenth Lok Sabha) on the action taken by the Government on the recommendations contained in the 26th Report of the Standing Committee on Energy on Demands for Grants (2008-2009) of the Ministry of New and Renewable Energy.

2. The 26th Report of the Standing Committee on Energy was presented to Lok Sabha on 22nd April 2008. Replies of the Government to all the recommendations contained in the Report were received on 14th August, 2008.

3. The Standing Committee on Energy considered and adopted this Report at their sitting held on 27th January, 2009.

4. An Analysis on the Action Taken by the Government on the recommendations contained in the 26th Report of the Committee is given at **Appendix-II**.

5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

NEW DELHI;
27 January, 2009
7 Magha, 1930 (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 26th Report (14th Lok Sabha) of the Standing Committee on Energy on Demands for Grants (2008-09) of the Ministry of New and Renewable Energy.

2. The 26th Report was presented to Lok Sabha on 22.04.2008 and was laid on the Table of Rajya Sabha on the same day. It contained 35 Observations/Recommendations.

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

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

Sl. Nos. 1, 2, 3, 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17, 19, 22, 23, 25, 26, 27, 29, 31, 32, 33, 34 and 35 Total - 26
Chapter - II

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

Sl. No. 4 Total - 01
Chapter - III

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

Sl. Nos. 10, 11, 18, 20, 21, 24, 28 and 30 Total - 08
Chapter - IV

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

Sl. No. Nil Total - Nil
Chapter - V

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

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

A. Renewable Energy Law

Recommendation (Serial No. 9)

6. Taking note of the fact that in our country, use of renewable energy has been mandated through the Electricity Act, 2003 and so far only 12 State Electricity Regulatory Commissions had notified Renewable Energy Portfolio Standards to promote co-generation and generation of electricity from renewable sources of energy—which vary from 2 per cent to 10 per cent, the Committee urged the Government to have a separate Renewable Energy Law, as enacted by some of the countries across the globe, mandating the exploitation and use of renewable energy. The Committee had desired to be informed about the precise action taken in this regard.

7. The Ministry in their reply have stated:

“The preparation of an Umbrella Renewable Energy Law to provide a comprehensive legislative framework for all types of renewable energy technologies and usage and promotion thereof that goes beyond electricity has recently been approved by the Energy Coordination Committee. Further necessary action has been initiated for preparation of an initial draft, which when ready, will be discussed with various stakeholders for finalization.”

8. As regards having a separate Renewable Energy Law to provide a comprehensive legislative framework for renewable energy sector, the Committee note that the Energy Co-ordination Committee has recently approved preparation of the same. However, the Committee are concerned to observe that no timeframe as yet has been fixed to frame up the desired law after discussing the same with various stakeholders. The Committee, therefore, recommend the Government to take necessary steps to ensure that the desired law be enacted expeditiously in a fixed timeframe for the optimal exploitation and use of new and renewable energy sources.

B. Integrated Energy Policy

Recommendation (Serial No. 10)

9. Taking note of the vision and mandate of the Ministry of New and Renewable Energy, the Committee had placed on record the fact that an uphill task was on the cards for the Ministry, for years to come. The Committee pondered over a possible conceptional change in regard to the ultimate use of energy drawn from renewable sources. While finding that the trend so far has been to use renewable energy as a substitute for conventional energy, the Committee opined that there was a need for a new approach to consider renewable energy not only as a substitute but as an additional and parallel but as a superior energy because the same was in the national interest. The Committee had put it as a poser to the Ministry and desired to await a response from the Government as to how this could be translated into a policy change.

10. In their reply, the Ministry have stated:

"It is an action imperative for the country to pursue all energy options—conventional, renewable and nuclear—to achieve its long term goals of energy security and energy independence. The Integrated Energy Policy Report of the Expert Committee constituted by Planning Commission has attempted to lay down a road map in this regard and the same is under consideration of the Government. In so far as Renewable Energy is concerned, the endeavour of the Ministry will continue towards lowering the costs and improving the reliability of various renewable energy systems through support to sustained R&D efforts. The Ministry will attempt conceptual clarity in the framework document to be prepared for the proposed Solar Mission."

11. The Committee note that the Integrated Energy Policy Report of the Expert Group constituted by the Planning Commission to lay down a roadmap for the long-term energy security and energy independence is presently under consideration of the Government. In view the pressing need for having such a policy in place at the earliest so as to ensure a holistic energy sector approach where various types of energy sources are integrated judiciously, the Committee desire the Government to take an early decision in the matter so that a National Integrated Energy Policy starts fructifying without any further precious loss of time and economic resources. The Committee also take note of the Ministry's assurance about attempting conceptual clarity in the framework document to be prepared for the proposed Solar Mission. The Committee expect that the Ministry would embark on this

endeavour with all the seriousness it deserves and finalise the framework document to this effect in a fixed time period after extensive debate and interaction with the all stakeholders and experts in the sector.

C. Wind Energy Programme

Recommendation (Serial No. 11)

12. The Committee observed that in spite of mature and proven technologies available for the generation of wind energy and active involvement of private sector therein, against an estimated potential of 45,000 MW of wind power in the country, the present installed capacity happened to be 7,938 MW as on January, 2008. The Committee were dismayed to find that the Ministry also failed to achieve the envisaged target during the year 2007-08 and the shortfall noted was to the extent of 655 MW. Taking strong objection to the reasons adduced by the Ministry in this regard, which were not only of a generalized nature but also repetitive in character, the Committee recommended that progress on projects and expenditure position needed to be improved in the current period to achieve the target of 2,000 MW grid-interactive power capacity addition from the wind power fixed for 2008-09.

13. The Ministry in their reply have stated:

“The actual expenditure under the wind power programme during 2007-08 has been Rs. 16.06 crore against the RE of Rs. 15.50 crore. Further, against the planned target of 1500 MW for the year 2007-08, 1663 MW has been achieved.

The fiscal incentives available for wind sector have been continued during the year 2008-09. The Ministry has recently proposed a pilot scheme of 50 MW incentivised through Generation Based Incentives (GBI) as against the accelerated depreciation route currently available. There has been a good response to the proposal as it opens up investment to independent power producers. The Ministry is proposing to upscale this initiative so that the targets for wind energy for the XIth Plan are met.”

14. The Committee note with satisfaction that the fiscal incentives available for wind sector have been continued during the year 2008-09. Further, the Ministry have recently proposed a pilot scheme of 50 MW through Generation Based Incentives (GBI) as against the currently available accelerated depreciation route. The Committee understand that the Ministry are proposing to upscale this initiative so that the

targets for wind energy for the XIth Plan are met. While supporting the 50 MW pilot scheme through GBI, the Committee would like to be apprised of the current grid-active status of 7938 MW of installed capacity of wind energy. The Committee would also like to be informed of the steps taken to achieve the target of 2000 MW grid-interactive power capacity addition, fixed for 2008-09 from the wind power.

D. R&D in the Wind Energy Sector

Recommendation (Serial No. 13)

15. The Committee found that an allocation of only Rs. 1.00 crore was made for Research & Development (R&D) during 2008-09 as against an overall allocation of Rs. 190 crore for the wind energy sector during 11th Plan. According to the Ministry, R&D activities in wind energy sector were carried out both by the Government and private sector wind turbine manufacturers. The Government R&D reportedly focused on areas mainly relating to design methodology for the wind turbine blades, grid related studies, wind resource assessments, maintenance aspects of major components of wind turbines, etc. The Committee were given to understand that a consolidated R&D strategy was in the process of finalisation before more funds be sought during the remaining plan period. The Committee had desired to know the final R&D strategy proposed to be brought into operation for the wind energy sector.

16. The Ministry in their reply have stated:

“The R&D Council of the Centre for Wind Energy Technology decided to prepare a strategy paper on coordinated R&D programme on the identified thrust areas in wind energy sector. Inputs in this regard have been obtained from all major stakeholders including industries, academic and research institutions, such as, Indian Institutes of Technology, Indian Institute of Science, CSIR Laboratories, Engineering Colleges etc. A stakeholders meeting to finalize the strategy paper has been planned in the last week of August 2008.”

17. The Committee note with appreciation that in pursuant to their recommendation, the R&D Council of the Centre for Wind Energy Technology has developed a strategy paper on coordinated R&D programme on the identified thrust areas in the Wind Energy Sector. The Ministry have also apprised the Committee that a strategy paper, for which, inputs have been obtained from all the stakeholders including industries, academic and research institutions, such as, Indian

Institutes of Technology, Indian Institute of Science, CSIR Laboratories, Engineering Colleges etc. was planned to be finalized at a stakeholders' meeting scheduled to be held in the last week of August, 2008. The Committee would like to be apprised of the action taken/proposed to be taken by the Ministry as a follow up to the decisions/suggestions emanating from the proposed meeting.

E. Preparation of Indian Wind Atlas

Recommendation (Serial No. 14)

18. The Committee observed that a Wind Atlas with fine resolution is essential for a country for the identification of windy locations and the development of wind energy. The Ministry had sanctioned a project on preparation of Indian Wind Atlas to Centre for Wind Energy Technology (C-WET), Chennai in association with RISO National Laboratory, Denmark in November, 2006 at an estimated cost of Rs. 2 crore. The project is expected to be completed by the end of 2008-09. The Committee desired to be apprised of the present status of this project.

19. In their reply, the Ministry have stated:

"The preparation of Indian Wind Atlas in association with RISO National Laboratory, Denmark is in the final stage. Three pilot areas were selected covering different topography and climate types. The wind monitoring data collected from these pilot areas was used for validation exercise. In order to have preliminary idea of the offshore wind resources, parts of the sea surrounding the country are also included in the project. The pilot area model and validation has been completed and the result is found to be satisfactory for further proceeding of the project. Three scientists of C-WET have undergone training in the numerical model. The work under the project is in progress for completion of the Wind Atlas by March 2009."

20. The Committee find that the preparation of Indian Wind Atlas in association with RISO National Laboratory, Denmark is in the final stage and the Ministry had selected three pilot areas covering different topography and climate types for the purpose. Although, the Committee are satisfied to note that the work under the project is reported to be in progress for completion of the Indian Wind Atlas by March 2009, the Committee would urge the Government to ensure that the Indian Wind Atlas be completed as scheduled and be also made available on the website of the Ministry after its completion.

F. Solar Energy Programme

Recommendation (Serial No. 18)

21. The Committee appreciated the new initiative of the Ministry to promote installation of mega-watt scale solar power generation plants of a minimum capacity of 1 MW. The Ministry had earmarked Rs. 14 Crore for 2008-09 for this programme to achieve capacity installation of 14 MW. The Committee recommended that the cap set for the promotion of grid interactive mega-watt scale solar power generation programme be suitably reviewed to encourage the interested States like Rajasthan so that the budgetary support of Rs. 14 Crore (BE) for 2008-09 be fully utilized. The Committee also recommended that the Ministry might alternatively explore possibility of sponsoring one of the mega-watt scale demonstration project in the premises of Solar Energy Centre to get proper feedback/ evaluation of the programme.

22. The Ministry in their reply have, however, stated:

“The Ministry is of the view that the targets announced under the demonstration programme may continue to be implemented and initial performance data be collected on megawatt size grid connected power plants. This may not be linked to review of the scheme including removal of cap. The States, which have announced separate tariff for solar power, can implement solar power projects outside the demonstration programme of the Ministry. There is no restriction to take up projects by such States. A 2 MWp capacity solar PV power plant is being set up in West Bengal. The other States are also expected to clear projects for support under the demonstration programme. The recommendation of the Committee to set up one of the MW-scale solar power plants in the premises of SEC for getting feedback/ evaluation of the programme has been noted. Under the proposed Solar Mission, it is proposed to upscale the quantum of solar generated electricity.”

23. The Committee note that a 2 MWp Solar PV Power Plant is being set up in West Bengal and the Ministry expect the other States to clear projects for support under the demonstration programme. The Ministry also expect that the BE of Rs. 14.00 crore for 2008-09 on these activities will be fully utilized. The Committee, however, observe that reply of the Ministry is silent about the other projects which are proposed to be set up under the programme. The Committee would like to be apprised about the specific projects identified and approved by different States to be taken up under the programme for the current year.

24. As regards the Committee's recommendation about exploring the possibility of setting up one of the MW scale demonstration project in the premises of Solar Energy Centre to get proper feedback/evaluation of the programme, the Ministry have merely stated that they have noted the same. The Committee note that nothing concrete has been stated as regards the implementation of recommendation of the Committee. They would, therefore, reiterate their earlier recommendation that a MW scale demonstration project be set up in the Solar Energy Centre, Gurgaon to get proper feedback/evaluation of the programme and would like to be apprised of the concrete action taken by the Government to implement the same.

G. Follow up and Maintenance Mechanism for Solar Devices

Recommendation (Serial No. 20)

25. The Committee had expressed deep concern over the absence of proper follow-up and maintenance mechanism subsequent to installation of various solar devices under the solar Photovoltaic Programme of the Ministry. The Committee drew the attention of the Ministry to the consequential difficulties faced by the consumers in the event of failure of those devices – in the absence of a reliable and long-term service back up. The Committee observed that in such a scenario, the confidence level of users falls very low and functional reliability of the various systems is in question. The Secretary, Ministry of New and Renewable Energy had also assured the Committee that a maintenance support mechanism would be built into the system for redressing the post-installation problem faced by the users. The Committee had desired to know the action taken in the matter.

26. In their reply, the Ministry have stated:

"The programmes of the Ministry have a provision of Annual Maintenance Contract (AMC) for 5 years for the SPV systems, including 2 years warranty on the complete systems. The State agencies are expected to monitor the progress before they release funds for AMC to system suppliers on annual basis. The agencies will be requested to strengthen the existing after sales service network through Akshaya Urja shops and the service centers set up by the manufacturers which are involved in the supply of the systems."

27. The Committee are constrained to observe that though the Secretary, Ministry of New and Renewable Energy, having appreciated the concern of the Committee during evidence about the absence of

proper follow up and maintenance mechanism for devices installed under the SPV programme had assured them that a maintenance support mechanism would be built into the system for redressing the post-installation problem faced by the users, the Ministry, after a lapse of more than four months have come up with only a half-hearted response that the agencies will be requested to strengthen the existing after sales service network through Akshaya Urja Shops and the service centers set up by the manufacturers, which are involved in the supply of systems. The Committee do not appreciate this kind of reply from the Ministry. It would have been appreciated, if all the concerned were instructed before the action taken was reported to the Committee. The Committee, therefore, reiterate their earlier recommendation and desire that needful should be done without any further loss of time. The Committee would like to be apprised of the action taken by the Government in this regard.

H. R&D strategy for Solar Energy Sector

Recommendation (Serial No. 21)

28. The Committee observed that against an allocation of Rs. 17.5 crore for Research and Development (R&D) during past three years for solar energy sector, only Rs. 1.44 crore could be expended in this direction. Notwithstanding the reasons advanced for meagre spending in this area, the Committee were of the firm view that the Ministry should focus their attention in a big way on R&D investment in the solar energy sector. The Committee emphasized that vision should be beyond the photovoltaic technology to enhance efficiency and for that matter the Ministry needed to venture technology collaboration with leading players in the field across the globe. The Committee believed that breakthrough in this field would support the Ministry in a big way in their pursuit to bring down the cost of solar energy generation compared to that from conventional sources.

29. The Ministry in their reply have stated:

“The global efforts in the solar power generation are to achieve technological breakthroughs to significantly reduce the cost through both solar photovoltaic and solar thermal routes. Several technology options are emerging, however, no proven option is available to give cost competitive and commercially viable solar energy technologies. The focus of the R&D efforts during the 11th plan is to support development of solar energy technologies, which could lead to improvements in the performance and cost reduction. The recently announced demonstration programme for grid interactive

solar power projects encourages project developers to use efficient technologies that could be available nationally and globally to achieve cost competitiveness of the projects, and thereby leading to introduction of the advanced technologies in the country. Under the Solar Mission, an R&D strategy will be proposed after consultation with experts."

30. The Committee have been given to understand that the global efforts in the solar power generation are to achieve technological breakthroughs to significantly reduce the cost through both solar photovoltaic and solar thermal routes. According to the Ministry, the focus of the R&D efforts during the 11th Plan is to support development of solar energy technologies, which could lead to improvements in the performance and cost reduction of solar devices. The Committee also note that under the Solar Mission, an R&D strategy will be proposed by the Ministry after consultation with experts. Taking note of the fact that no concrete action so far has been taken by the Government to finalise the R&D strategy for solar power programme, the Committee reiterate their earlier recommendation and desire that the R&D strategy in this regard should be finalized at the earliest in consultation and collaboration with leading players in the field across the globe. The Committee would like to be apprised of the action taken in this regard.

I. SHP Development Programme

Recommendation (Serial No. 24)

31. The Committee were concerned to find that in some States only a very small quantum of identified SHP potential has been tapped so far. A scrutiny of relevant data revealed that the ratio of installed capacity of SHP projects to potential availability in the State of Arunachal Pradesh, Chhattisgarh, Himachal Pradesh, Jharkhand, Orissa and Uttarakhand was very dismal. The Committee had desired to be apprised of the reasons for such abysmal performance in respect of these States and also about the measures taken to improve level of achievement. The Committee were given to understand that the private developers for small hydro projects were not facing any genuine problems in selling the power generated from Small Hydro Projects (SHPs) as tariff has been fixed by the State Electricity Regulatory Commissions (SERCs) for sale of electricity. However, the Committee found that in some States, developers felt that the purchase price of power from SHP is very low. The Committee therefore, had recommended that Ministry, should take up the matter with all States and Union Territory having potential for Small Hydro Projects for fixing preferential tariff for hydro power as had been done

by SERCs in Andhra Pradesh, Himachal Pradesh, Karnataka, Maharashtra, Chhattisgarh and Punjab for promotion / development of new SHP projects and desired the Ministry to have better coordination with the States to give a major fillip to this programme.

32. In their reply, the Ministry have stated the present position with regard to SHP development in the cited States as under:

- In the State of Chhattisgarh, Himachal Pradesh and Uttaranchal, SHP development is mainly through private sector participation. In Chhattisgarh, 58 SHP projects aggregating to 500 MW have been allotted to private developers. These projects are likely to come up in next two years.
- In Himachal Pradesh, 110 projects aggregating about 350 MW have been allotted to the private developers, of which 18 projects have been commissioned and 20 more projects are scheduled to be completed during 2008-09.
- In Uttaranchal, about 30 projects stand allotted, of which 6 projects have been completed. The State Government has reportedly revised its policy recently and it is expected that more projects would get commissioned in the State in next 2-3 years.
- The Ministry is paying special attention to tap the hydro potential in Arunachal Pradesh. 72 SHP projects with a total capacity of over 90 MW are under implementation in the State. It may be mentioned that Hon'ble Prime Minister has announced a special package of Rs. 550 crore for the development of small hydro and installation of solar photovoltaic systems for electrification/illumination of border areas in Arunachal Pradesh. Recently, Arunachal Pradesh has also announced a policy for inviting private sector to setup SHP projects.
- Government of Orissa has announced policy for private sector participation to develop SHP projects. The first private sector project of 20 MW capacity is likely to be commissioned by September 2008.
- 8 SHP projects aggregating 34.85 MW are under construction in the State of Jharkhand.
- With regard to low tariffs in some States, the Ministry has been interacting with various SERCs for giving preferential tariff to renewable energy based power projects including

small hydro. More recently, it is working with the Central Electricity Regulatory Commission for evolving specific guidelines for the pricing of renewable power. The same when announced would help in bringing uniformity in tariff fixation across the States."

33. The Committee note that several Small Hydro Projects are presently in offing both in the State Sector and the private sector. The Committee are not satisfied with the present level of implementation of SHP in Himachal Pradesh wherein out of 110 projects aggregating about 350 MW and allotted to the private developers, only 18 projects have been commissioned and 20 more projects are scheduled to be completed during 2008-09. Similarly, in Uttaranchal, about 30 projects stand allotted, of which 6 projects have been completed. The State Government of Uttaranchal has reportedly recently revised its policy to this effect and it is expected that more projects would get commissioned in the State in next 2-3 years. Keeping in view that the SHPs are low investment, short gestation and less environment impacting entities, the Committee feel that they should be accorded top priority for execution so that they can play a major role in contributing to our quest for self-reliance in the energy sector. The Committee would, therefore, like to be apprised of the action taken by the Government to boost implementation of SHPs in various States. The Committee also recommend that the Ministry should chalk out and put in place a Centralized coordinated mechanism for monitoring the progress of implementation of all these small hydro projects across the country.

34. The Committee have been informed that Hon'ble Prime Minister has announced a special package of Rs. 550 crore for the development of small hydro and installation of solar photovoltaic systems for electrification/illumination of border areas in Arunachal Pradesh. The Committee expect the Government to implement the above referred special package for Arunachal Pradesh in a time bound manner and recommend the Ministry to propose for similar packages for other bordering States as well for developing and tapping various new and renewable energy resources.

35. Amongst the various measures being taken by the Ministry to encourage the setting up of SHPs, the Committee find that fixing of preferential tariff for hydro power, is a forward looking initiative which can give a tremendous boost to SHPs. The Committee are, however, surprised to note that SERCs of only six States have till date fixed preferential tariff for hydro power. Apart from interacting with the SERCs on this matter, the Committee have been informed that the Ministry of New and Renewable Energy is now working with the

Central Electricity Regulatory Commission for evolving specific guidelines for the pricing of renewable power. Once in place, these guidelines are expected to usher in the much needed support for the power generated from renewables across the States. The Committee, therefore, desire that the Ministry in tandem with the CERC should expeditiously finalise the guidelines for pricing of renewable power so that a uniform tariff structure is put in place across the country at the earliest.

J. Remote Village Electrification Programme

Recommendation (Serial No. 28)

36. The Committee noted with concern the poor achievements *vis-à-vis* the targets fixed for Remote Village Electrification Programme (RVEP) during the 10th Plan period where as against the sanctioned target of 5163 villages, only 2860 villages could be electrified and a sum of Rs. 247.33 crore was utilized against an allocation of Rs. 735 crore. For the 11th Plan, the Ministry have earmarked an outlay of Rs. 650 crore to cover 9000 villages. However, the Committee observed that although in the first year of the 11th Plan (2007-08), 2000 villages/hamlets were targeted to be covered under the programme at a cost of Rs. 108 crore, the allocation at RE stage was drastically pruned down to Rs. 75 crore. Further, upto 31st January, 2008, *i.e.*, ten months of the financial year, only 453 villages had been reported to be electrified at the cost of Rs. 45.60 crore. Pertinently, 25% of the targeted villages had been covered while spending 60% of the allocated funds during 2007-08. In view of the poor achievements for the programme during 10th Plan period and during 2007-08, the Committee recommended that the Government should take effective steps so that the targets for the Annual Plan 2008-09 to electrify 1500 villages at the cost of Rs. 80 crore and total target to cover 9,000 villages during the 11th Plan at the cost of Rs. 650 crore could be achieved.

37. The Ministry in their reply have stated the position with respect to the target and achievements for the 10th Plan as follows:

Target for coverage of remote villages for the Plan period	: 5000 villages
No. of villages for which support has been sanctioned	: 5163 villages
No. of villages where work was completed by March, 07	: 2860 villages
No. of villages where work was ongoing as on 31-3-2007	: 2303 villages
No. of villages where work has been completed by March, 08	: 1280 villages

Thus, it can be observed that the Ministry had over-achieved the target for sanctioning of support for the Plan period. Further, the implementation at the ground level is the responsibility of the state implementing agencies, most of which are, unfortunately, highly under-staffed. The Ministry has been persistently requesting the States to strengthen their implementation machinery and a substantial service charge is also being provided so that financial constraints, if any, could be overcome.

During 2007-08, against a target of providing support for 2000 villages, the Ministry approved support for 1992 villages and hamlets. Against a BE of Rs. 143 crores and a RE of Rs. 110.55 crore, the actual expenditure was Rs. 133 crores. It may be mentioned that the expenditure figures would have reached BE level but for non-availability of funds due to cuts in the Ministry's budget.

The programme provisions are being reviewed for suitable modifications for more effective implementation during the remaining period of the 11th Plan."

38. The Committee are concerned to note that although the Ministry of New and Renewable Energy had sanctioned support for 5163 villages for the Remote Village Electrification Programme as against the target set at 5000 villages during the 10th Plan, the work was reported to be complete only in 2860 villages by March, 2007. Taking note of the fact that as on March, 2008, work in 4140 villages was completed, the Committee would like to be apprised of the present status of execution of works in the remaining villages for which works were sanctioned during the 10th Plan. The Committee are, however, dismayed to observe that the State implementing agencies, which execute these projects at the ground level are reported to be highly understaffed. The Committee recommend that the Government should take up the matter with the respective State Governments and ensure that the target set for the 11th Plan under RVEP should not be affected due to the reasons like understaffing of implementing agencies.

K. District Advisory Committees

Recommendation (Serial No. 30)

39. The Committee observed that the idea of setting up of the District Advisory Committees (DACs) was to strengthen efforts of the Government in creating mass awareness and improve the existing delivery system for the deployment of renewable energy systems/devices. In all, 560 DACs had so far been set up with the aforesaid objectives in mind.

The Committee were, however, constrained to find that the DACs in most of the States are non-functional as regular meetings thereof were not convened. Taking strong exception to this sordid state of affairs, the Committee emphasized that urgent action be initiated by the Ministry to ensure that DACs be made functional and carry out the assigned job to achieve the desired objectives.

40. In their reply, the Ministry have stated:

“In order to motivate the States about organizing DACs meetings regularly and effectively, the Orientation-cum-training programmes for district authorities and DAC members have been organized in eleven States namely, Assam, Andhra Pradesh, Maharashtra, Uttar Pradesh, Haryana, Uttaranchal, Madhya Pradesh, Orissa, Kerala, Sikkim and Rajasthan. Further, regular follow-ups have been carried out with States and Districts for organizing the meetings of DACs regularly. The reports of meetings of DACs have been received from 181 districts. Further, to educate the DAC members with the latest developments on renewable energy, their visits are also organized at Solar Energy Centre of this Ministry as per request of the States.”

41. The Committee find that in pursuance of their recommendation about activating the 560 District Advisory Committees, the Ministry have organized orientation-cum-training programmes for the district authorities and District Advisory Committee members in eleven States. Further, Reports of meetings of District Advisory Committees in regard to 181 districts have been received so far. In order to educate District Advisory Committee Members with the latest development on renewable energy, their visits are also organized at Solar Energy Centre of the Ministry on request from the States. The Committee are, however, concerned to note that despite the renewed efforts of the Ministry, hardly one-third of the States have so far been covered for orientation-cum-training programme of the Ministry. The Committee, therefore, desire that the Ministry should strive hard to ensure that all District Advisory Committees are fully functional and able to carry out the activities assigned to them. The Committee expect the Government to complete the training programme by covering all District Advisory Committees in a fixed timeframe.

CHAPTER II

OBSERVATIONS/RECOMMENDATIONS THAT HAVE BEEN ACCEPTED BY THE GOVERNMENT

Recommendation (Para No. 1)

The Committee note that the budget allocation of the Ministry of New and Renewable Energy for the year 2008-09 is Rs. 624.09 crore wherein Revenue Section accounts for Rs. 593.89 crore and Capital Section constitutes Rs. 30.20 crore. Against this, the Budget Estimates (BE) for the year 2007-08 stood at Rs. 632.90 crore, which were subsequently reduced to Rs. 489.82 crore at Revised Estimates (RE) stage *i.e.* a net reduction of about Rs. 143.08 crore. The downward revision of BE was attributed to a general cut imposed by the Ministry of Finance and a lower level of expenditure during the first two quarters of the preceding financial year. What is further disquieting to note is the fact that against planned RE of Rs. 483 crore, actual expenditure upto February, 2008 was only Rs. 357.12 crore. Although the financial prudence for expenditure requires that in the last month of the financial year expenditure should not exceed 15 per cent of BE, the Committee observe that the Ministry have, however, been permitted to utilize the funds upto RE level during the financial year due to required re-appropriation of funds in respect of certain sanctioned and approved projects. A scrutiny of the quarterly utilization of funds during 2007-08 reveals that while the Ministry could spend only Rs. 63.45 crore and Rs. 47.90 crore respectively in the first two quarters, the bulk of expenditure took place in the 3rd and 4th quarters of the financial year.

Recommendation (Para No. 2)

In their earlier Report, the Committee were concerned to observe that over the years, there had been persistent shortfall in utilization of budgeted amount by the Ministry. As a matter of corrective steps taken in this regard, the Committee were subsequently informed that various measures were taken by the Ministry to ensure full utilization of budget allocation during the financial year 2007-08. These broadly included, streamlining of procedural framework, rationalisation and simplification of ongoing Programmes/Schemes for 11th Plan, periodic interaction with State-level Implementing Agencies, frequent in house review meetings

to closely monitor the pace of expenditure, etc. The Committee are, however, constrained to observe that despite the corrective measures claimed to have been taken, the Ministry once again failed to match expenditure upto the desired level of budget allocation, thereby resulting in sizeable cut of provision at RE stage. The Committee are somewhat content to note that total expenditure in 2007-08 would at least be at the highest level during the past six years. While acknowledging the fact that annual plans and projections do keep changing as there is involvement of various agencies at the Central and State level to implement Schemes/ Programmes of the Ministry, the Committee desire that the fluctuations should be confined to such an extent that the financial utilization of the approved outlays and physical achievement of targets depict a realistic assessment. The Committee are fully aware of the fact that bulk of allocation goes for rural village electrification, urban applications and village energy security projects and for that matter the Ministry have to work necessarily through the concerned State Governments. This, in turn, calls for institution of a sound mechanism for effective coordination between the Ministry and State Governments to help curb delays that hamper implementation of Plan Projects. In the opinion of the Committee, holding the State Governments entirely responsible for persistent shortfall in utilization of funds will not help the Ministry in fulfilling their mandate. What is, therefore, imperative on the part of the Ministry is to earnestly pursue the corrective measures initiated by them for the effective implementation of projects and obtaining desired results. The Committee are inclined to share the positives in the wake of several additional initiatives launched in 2007-08 by the Ministry and trust that the level of expenditure would improve substantially to match the budget allocation for the current financial year 2008-09.

Reply of the Government

The concern of the Committee has been noted. It may, however, be mentioned that during 2007-08 against a RE of Rs. 483.00 crore the total expenditure was Rs. 479.00 crore, which was over 99% of the RE. The endeavour of the Ministry will be to improve the level of expenditure during the current financial year as well as distribute it over the quarters. There would be increased interaction with the States to ensure that this is possible to be done.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 3)

Another grey area, which demands reoriented approach on the part of the Ministry relates to undesirable rush of expenditure towards

the close of the financial year. The Committee recommend that the trend of expenditure within a given financial year needs to be rationalized in terms of financial jurisprudence and thrust should be for a balanced and reasonably uniform pattern of spending. The Committee would like to be apprised of the prudent measures taken by the Ministry for advance and realistic planning in the above context.

Reply of the Government

The recommendation has been noted for further compliance. During 2008-09 the Ministry is focusing on rigorous monitoring of the progress under various programmes right from the beginning and holding periodic review meetings with different State agencies/stakeholders to ensure a uniform and maximum utilization of the funds by the third quarter for avoiding undesirable rush of expenditure toward the close of financial year.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 5)

The Committee are, however, happy to find that during 10th Plan, overall renewable power capacity addition was to the extent of 6795 MW, estimated to be about 25% of the capacity addition from conventional sources during the same period, against a set target of 10%. Taking into account the percentage share of renewables to the total energy sector outlay, which was only 2.51% during 10th Plan, capacity addition of this magnitude, no doubt, is appreciable and provides an encouraging trend. At the same time, what worries the Committee, in particular, relates to financial performance, which was very mediocre and far from inspiring. The Committee, therefore, urge upon the Ministry to draw lessons from the past experience, reorient their approach and take suitable measures for creating a prudent and optimal expenditure regime during 11th Plan.

Reply of the Government

The suggestion of the Committee has been noted. Stress is being laid on better planning at Annual Plan formulation stage for more realistic assessment of the budgetary requirements. The programmes have also been rationalized and re-oriented/classified in to 5 broad areas *i.e.*, Renewable Power, Renewable Energy for Urban Industrial & Commercial Applications, Renewable Energy for Rural Applications, Research Design & Development in Renewable Energy, and Support programmes, for focused implementation, which should lead to better utilization of plan funds. The Ministry also proposes to incentivise generation of power.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 6)

The Committee find that the target for grid-interactive renewable power capacity addition for the 11th Plan is estimated to be 14050 MW and target envisaged for distributed Renewable Power System is 1000 MW. Against a Gross Budgetary Support of Rs. 8500 crore proposed by the Ministry for the 11th Plan, a sum of Rs. 4,000 crore has been approved, which is considered to be inadequate for achieving planned objectives. According to the Ministry, Planning Commission, however, has assured that a suitable increase in the allocation could be considered based on the performance of the Ministry in the first two years of the Plan period. While taking note of the average performance in the first year of the plan period where budget allocation got slashed to a major extent, the Committee desire that the approach of the Ministry be focused towards achieving targets set in the current Plan Period with optimum utilization of funds so as to secure the desired increase in allocation from the Planning Commission for the remaining three years of the 11th Plan.

Reply of the Government

As desired by the Committee the Ministry will take all steps including help of members of Standing Committee to focus on achieving physical and financial targets during first two years of the 11th Plan so as to secure enhanced allocation from the Planning Commission during the remaining three years of the 11th Plan. The endeavour of the Ministry will also be to attract maximum private investment in the Renewable Energy sector with the available Gross Budgetary Support.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 7)

The Committee observe that the impetus given to the 11th Plan in terms of rationalizing the ongoing programmes during 10th Plan is a welcome step. The Committee hope that this restructuring of the existing activities would give better focus to specific areas and in the process the Ministry should be able to yield better results in the 11th Five Year Plan.

Reply of the Government

The Ministry is also hopeful that the restructured programmes will lead to better physical and financial achievements under the on-going restructured programmes. Suggestions of the Committee will be actively pursued for their effective implementation.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 8)

Regarding future policy of the Government to tap energy from various renewable sources, the Committee take note of the projection made in the Integrated Energy Policy Report which anticipated capacity addition of 30,000 MW from wind, 50,000 MW from biomass and 10,000 MW from solar by 2032. Although renewables are likely to account for only around 5-6 per cent of the primary commercial energy mix by 2032, it is an imperative of the development process that the share of renewable energy in the fuel-mix should substantially increase in the longer term. The Committee, would, therefore, stress that continuation of support to new and renewable energy growth will be in the country's long-term interest. Although the development process may warrant selection of least-cost energy options, strategic and environmental concerns may, on the other hand, demand a greater share for new and renewable energy even though in the medium-term this option might appear somewhat costlier. Thus, the Committee endorse that a balanced approach for new and renewable energy that factors in the need to develop domestic and inexhaustible sources of energy has to be adopted. With this long-term perspective in mind, the Committee expect that the Ministry will try its level best to achieve optimal results both in physical and financial terms.

Reply of the Government

The Observations of the Committee have been noted. The Ministry will strive to meet the Committee's expectations for optimal development of renewable energy sources in the country.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 9)

Taking note of the fact that in our country, use of renewable energy has been mandated through the Electricity Act, 2003 and only 12 State Electricity Regulatory Commissions have so far notified renewable energy portfolio standards which vary from 2 per cent to 10 per cent, the Committee urge the Government to have a separate Renewable Energy Law, as enacted by some of the countries across the globe, mandating the exploitation and use of renewable energy. The Committee would like to be informed about the precise action taken in this regard.

Reply of the Government

The preparation of an Umbrella Renewable Energy Law to provide a comprehensive legislative framework for all types of renewable energy

technologies and usage and promotion thereof that goes beyond electricity has recently been approved by the Energy Coordination Committee. Further necessary action has been initiated for preparation of an initial draft, which when ready, will be discussed with various stakeholders for finalization.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Comments of the Committee

(Please see Para No. 8 of Chapter-I of the Report)

Recommendation (Para No. 12)

The Committee emphasize that extensive and active participation of private sector is the key for augmenting wind power generation in the country. It is understood that all the States having potential wind power have announced policy for this sector including declaration of tariff for purchase of electricity from wind power projects. The Committee take note of the host of fiscal concessions extended to the private developers along with introduction of generation based incentives and appreciate the consequential overwhelming achievement in the past. They fully support the Ministry on this count and desire that these concessions and initiatives need to be continued in the long run besides striving for a uniform buy-back tariff regime encouraging Independent Power Producers.

Reply of the Government

The actual expenditure under the wind power programme during 2007-08 has been Rs. 16.06 crore against the RE of Rs. 15.50 crore. Further, against the planned target of 1500 MW for the year 2007-08, 1663 MW has been achieved.

The fiscal incentives available for wind sector have been continued during the year 2008-09. The Ministry has recently proposed a pilot scheme of 50 MW incentivised through GBI as against the accelerated depreciation route currently available. There has been a good response to the proposal as it opens up investment to independent power producers. The Ministry is proposing to upscale this initiative so that the targets for wind energy for the XIth Plan are met.

The subject of tariff fixation and related issues is of *quasi-judicial* nature, in the implementation of which this Ministry has no direct role.

Even then this Ministry has been taking up such matters with the State Governments from time to time depending upon the facts and circumstances of the cases. However, there is no increase in tariff for wind power generation.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 13)

The Committee find that an allocation of Rs. 1.00 crore has been made for Research & Development (R&D) during 2008-09 as against an overall allocation of Rs. 190 crore on wind energy sector during 11th Plan. According to the Ministry, R&D activities in wind energy sector are carried out both by private sector wind turbine manufacturers and Government. The Government R&D reportedly focuses on areas mainly relating to design methodology for wind turbine blades, grid related studies, wind resource assessments, maintenance aspects of major components of wind turbine etc. The Committee have been given to understand that a consolidated R&D strategy is in the process of finalisation before more funds are sought during the remaining plan period. The Committee would like to be apprised of the final R&D strategy proposed to be brought into operation in the wind sector.

Reply of the Government

The R&D Council of the Centre for Wind Energy Technology decided to prepare a strategy paper on coordinated R&D programme on the identified thrust areas in wind energy sector. Inputs in this regard have been obtained from all major stakeholders including industries, academic and research institutions, such as, Indian Institutes of Technology, Indian Institute of Science, CSIR laboratories, Engineering Colleges etc. A stakeholders meeting to finalize the strategy paper has been planned in the last week of August 2008.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Comments of the Committee

(Please *see* Para No. 17 of Chapter-I of the Report)

Recommendation (Para No. 14)

The Committee observe that a Wind Atlas with fine resolution is essential for a country for the identification of windy locations and the development of wind energy. The Ministry had sanctioned a project on preparation of Indian Wind Atlas to Centre for Wind Energy

Technology (C-WET), Chennai in association with RISO National Laboratory, Denmark in November, 2006 at an estimated cost of Rs. 2 crore. The project is expected to be completed by the end of 2008-09. The Committee may be apprised of the status of this project in due course.

Reply of the Government

The preparation of Indian Wind Atlas in association with RISO National Laboratory, Denmark is in the final stage. Three pilot areas were selected covering different topography and climate types. The wind monitoring data collected from these pilot areas was used for validation exercise. In order to have preliminary idea of the offshore wind resources, parts of the sea surrounding the country are also included in the project. The pilot area model and validation has been completed and the result is found to be satisfactory for further proceeding of the project. Three scientists of C-WET have undergone training in the numerical model. The work under the project is in progress for completion of the Wind Atlas by March 2009.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Comments of the Committee

(Please see Para No. 20 of Chapter-I of the Report)

Recommendation (Para No. 15)

The Committee observe that utilization of solar energy is basically effected through Photovoltaic and thermal technologies. The Programme of the Ministry primarily includes Research and Development, demonstration, commercialization and utilization activities in respect of solar energy technologies. These Programmes are being implemented through the State Nodal Agencies, IREDA, R&D and industrial organizations. In the current financial year, an allocation of Rs. 115.75 crore has been made for the solar energy Programme. Against this, the budget provision for 2007-08 was of the order of Rs. 131.00 crore, which was reduced to Rs. 81.75 crore at RE Stage. The actual expenditure incurred by the Ministry till January, 2008 amounted to only Rs. 46.45 crore.

Reply of the Government

The actual expenditure incurred by the Ministry on solar PV and solar thermal programmes till 31st March 2008 was Rs. 77.93 crore. •

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 16)

The Solar Photovoltaic Programme of the Ministry consists of three major components, namely, (i) Solar Photovoltaic technology & Demonstration, (ii) Solar Photovoltaic Water Pumping and (iii) Urban applications of Solar Photovoltaic. The Committee reviewed the performance of the SPV Programme during 10th Plan at some length and the achievements in terms of physical parameters are found to be far from satisfactory. This is evident from the fact that the achievement was much lower compared to the envisaged targets in respect of major components like Solar Home Lighting systems, Solar lanterns, and Solar Pumps. What is further disturbing to note is the fact that similar trend continued during the subsequent year of 10th Plan *i.e.* 2007-08 also where achievements lagged far behind stipulated targets. The financial performance depicts rather a gloomy picture where a sum of only Rs 24.84 crore could be spent till January 2008 against an enhanced RE of Rs. 49.75 crore for the year. Expressing displeasure over the sub-optimal performance in this sector, the Committee desire that remedial steps be taken along with promotion of ongoing incentives to ensure fulfillment of stipulated objectives.

Reply of the Government

The details of the physical and financial performance of the SPV programme during the 10th plan period and the first year of 11th Plan *i.e.* 2007-08 are given in the Tables below. There was a slowdown during 2004-05 and during 2005-06 till December 2005, as the Ministry announced no new programme. A new programme could be announced only in January 2006; therefore, the achievements of the targets are spilled over to the next financial year. Efforts are being made to avoid such trends. It is proposed to upscale our efforts in remote villages. The Ministry is taking pro-active steps in promoting these applications.

A. 10th Plan Period

(i) Physical Progress

Item/Year	2002-03		2003-04		2004-05*		2005-06		2006-07+		Total	
	T	A	T	A	T	A	T	A	T	A	T	A
Solar Home Lighting (No)	50000	28430	50000	11870	0	34844	42000	29632	60000	59262	202000	164038
Solar Lantern (No)	40000	13797	0	0	15000	21577	100000	72259	30000	22887	185000	130520
Power plants & street lights (kWp)	275	286	450	445	0	142.7	350	375	400	410	1475	1658.7
Solar Pumps (No)	1200	1073	1600	841	0	366	500	222	300	66	3600	2568
Grid power plant (kWp)	750	500	750	50	0	325	0	25	0	0	1500	900

(ii) Financial Progress

(Rs. in crore)

Budget/Expenditure	2002-03	2003-04	2004-05	2005-06	2006-07	Total
Budget Estimate	92.00	78.00	39.00	38.50	39.70	287.20
Revised Estimate	80.00	69.10	66.00	34.65	62.45	312.20
Actual Expenditure	74.30	63.92	21.45	34.44	62.30	256.41

B. 11th Plan Period - Year 2007-08

(i) Physical Progress

PV Systems	Allocations	Achievements reported
Solar Home Lights (Nos.)	63,200	59,282
Solar Lanterns (Nos.)	30,000	22,878
Street Lights and stand alone PV plants (kWp)	1,000	450

(ii) Financial Progress

Budget/Expenditure	2007-08
Budget Estimate	52.50
Revised Estimate	60.75
Actual Expenditure	55.47

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 17)

Thermal energy collected from the sun can be utilized for a variety of purposes, which include water heating, cooking, air-heating and drying, water distillation and power generation. These technologies are being promoted by the Ministry through different schemes. The Committee note that a total of 2.15 million square metre collector area has so far been installed for solar water heating in the country. About 30 solar steam generating systems and 50 solar air heating systems have also been installed in various institutions and industries. The Committee's examination, however, reveals that the performance of the Ministry during the year 2007-08 was very dismal in terms of achievement of targets. It is appalling to note that against a planned target of 20,000 solar cookers, only 213 could be provided. Against an installation target of 6.00 lakh square metre collector area for water heating systems, only 2.50 lakh square metre area was covered during the period. Moreover, there was also a substantial shortfall in the actual expenditure against a reduced RE for the year. In the opinion of the Committee, these figures clearly demonstrate the abject failure on the part of the Ministry in harnessing and promoting Solar Thermal Energy Programme.

Reply of the Government

Under the Solar Water Heating Programme, a target of 6 lakh sq.m. collector area was set for 2007-08, against which a total of 4.50 lakh sq.m. collector area was installed. The RE provision was fully utilized. In case of Solar Cookers Programme, against a target of 20,000 solar cookers for the year 2007-08, a total of 17713 solar cookers were sold according to reports received from States till now (July 2008). Reports from some of the States are still awaited. The Ministry is taking pro-active steps in promoting these applications.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 19)

The Committee find that an interest subsidy scheme is under implementation to promote the use of solar water heaters at large scale. Capital subsidy equivalent to upfront interest subsidy is also available to registered institutions and commercial establishments including hotels, hospitals etc. that do not avail soft loans under the scheme. Further efforts are being made by the Government to get the building byelaws amended through Municipal Corporations and State Regulatory Commissions/Utilities for announcing rebates in property tax and electricity tariff on use of solar water heaters. As regards Solar Cookers, the Committee have been informed that a scheme on solar steam generating systems is under implementation which provides support up to 50% of the cost of the systems installed in Community kitchens of institutions and up to 35% of the cost of systems in commercial establishments. The Committee do appreciate and commend the Ministry for taking all these policy initiatives for promotion of usage of these solar thermal devices. They desire that these measures should be earnestly pursued by the Ministry for effective implementation and the Committee be apprised of the outcome in due course.

Reply of the Government

The Observations of the Committee have been noted and the suggestions will be actively pursued for effective implementation of the programmes.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 22)

The Committee observe that most of the urban and industrial wastes find their way into land and water bodies without proper treatment,

leading to problems of environmental pollution with adverse effect on public health. The Committee are happy to note that at last the Ministry have in pursuance of their recommendations in successive reports gone for an estimation of the energy generation potential of urban and industrial wastes. The Committee note that as per the estimates, the potential for power generation from solid and liquid wastes generated in 423 Class-I cities of the country is 2600 MWs and is expected to be 5200 MW by 2017. The Committee are, however, distressed to observe that out of this immense amount of power generation potential, till date a mere 19.5 MW from urban waste and 59.45 MW from project based on industrial waste have been installed which is about 3 per cent of a very important eco-friendly source of energy. The Committee are, therefore, concerned over the lackadaisical attitude shown by the Ministry for exploitation of this renewable energy source in the country. The views of the Committee are further confirmed by the target of 15 MW set in the financial year 2008-09. The Committee feel that in view of the high cost and depleting reserves of fossil fuels, any delay in exploitation of currently available renewable sources of energy like urban and industrial wastes will cause dual damage - one to the environment from the combustion of fossil fuels and second from the pollution caused by discharge of urban wastes in water bodies and soil. The Committee cannot but deplore the way the Ministry continue to work at a snail's pace on this programme of immense national value. They therefore, desire that the Ministry should adopt a multipronged approach to give a boost to the programme with utmost priority so that urban and industrial wastes could be utilized for generation of energy. The Committee also recommend that a National Master Plan with a comprehensive roadmap for generation of 5200 MW from Urban and Industrial Wastes by 2017 should be finalized.

Reply of the Government

In regard to Energy from Municipal Solid Wastes, the Ministry has notified a scheme for setting up of five pilot projects in January 2008 in accordance with the directions of Hon'ble Supreme Court given during a hearing on Public Interest Litigation in May 2007. The target of 15 MW proposed for the year 2008-09 is against an overall target of 125 MW proposed for the 11th Five Year Plan. With a view to enlarge the Programme on energy recovery from other urban wastes, Ministry has taken a few other initiatives as given below:

- Scheme for energy from urban wastes has been made more broad based by including a component of energy recovery through co-fermentation of mix of urban, industrial and agricultural wastes.

- Research and Development projects have been taken up at Indian Institutes of Technologies for purification of biogas for producing Natural Gas quality fuel for improving the financial viability of biogas based projects.
- A guidebook is being prepared for promotion of setting up projects for power generation from biogas being generated at Sewage Treatment Plants in various cities.

In regard to industrial wastes, Ministry had initiated a separate accelerated programme on Energy Recovery from Industrial Wastes in the year 2005-06. During last two years, projects with an aggregate capacity of 33 MW have been installed whereas projects with a capacity of about 15 MW are under installation. The target proposed for the 11th Five Year Plan is 200 MW.

A National Master Plan for exploiting the entire potential for energy recovery from urban and industrial wastes has already been prepared. Initially five pilot projects have to be taken up as directed by the Supreme Court after which Government will take a view on implementation of further projects.

In the meanwhile, the subject of Energy from Urban Wastes was also discussed in the sitting of the Standing Committee on July 30, 2008. As desired by the Committee, a separate Note regarding the need for support of the Ministry of Urban Development for the programme on Energy Recovery from Municipal Solid Wastes will be sent to the Committee by the Ministry of New & Renewable Energy.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 23)

The Committee observe that SHP is more reliable of all renewable energy sources and can provide electricity for remote areas and hilly terrains in a cost effective manner. The Committee find that against the estimated potential of SHP projects (upto 25 MW) at 15,000 MW in the country and identified 5,403 technically feasible potential sites with an aggregate capacity of 14,294 MW, the installed capacity of small hydro projects (upto 25 MW) as on 31.01.2008 is only 2061.61 MW. As against estimated potential of about 1843 MW from canal based SHP projects, an aggregate capacity of 590 MW has been commissioned and projects with 208 MW capacity are under implementation. The Committee are dismayed to note that against the installed capacity of 1439 MW of SHP upto 9th Plan, the capacity addition during 10th Plan was only 567 MW. Further, during 2007-08 against the target of 200 MW, the actual

achievement is 80 MW upto 31.01.2008. The Committee are perturbed to find that despite providing incentives such as customs duty concessions and income tax exemption on SHP Projects and announcement of preferential capital subsidy in 2006, the State/Private Sector has not been able to tap the desired target during 2007-08. Hence, the Government may look into this aspect to identify problem areas and take corrective steps to achieve the desired objectives. Considering the current rate of increase in the prices of fossil fuels and the rate of depletion of fossil fuel, the Committee are of the opinion that very low physical (1400 MW) and financial targets (Rs. 700 crore) have been set up by the Ministry for the promotion of small hydro projects during 11th Plan. The Committee therefore, recommend that the Ministry may aim at higher targets and increase budgetary support for the promotion of small hydro projects so that the small hydro potential of the country is fully tapped.

Reply of the Government

There has been a consistent growth in the installed capacity of Small Hydro Power (SHP) projects. The SHP capacity addition increased from 269 MW during the 9th Plan to 567 MW during the 10th Plan, which is more than double during the 9th Plan. During 2007-08, a capacity addition of 204 MW was achieved against the target of 200 MW.

The Ministry has a limited role to play in the development of small hydropower projects since it is not involved in the allocation of sites and announcement of state-level policies. However, the Ministry regularly interacts with the State Governments/SERCs to pursue them for faster implementation and conducive policies for SHP development.

It is brought to the notice of the Committee that the benefits of Customs Duty concessions and income tax exemption available to SHP projects are the same as available to conventional power projects. The subsidy given by the Ministry for SHP projects is acting as a catalyst in the development of these projects and the present growth of about 200 MW per year is expected to go up by about 350 MW per year by the end of 11th Plan.

The Ministry is in the process of getting various schemes under SHP programme evaluated through an independent organization with a view to suitably modify these to make them more effective. The evaluation study would also suggest measures to achieve objectives and targets for the 11th Plan. As suggested by the Committee, all efforts will be made to achieve higher targets to tap the small hydro potential.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 25)

The Committee observe that due to the difficulties faced by the Ministry in implementing the 'interest subsidy scheme', the utilization of funds suffered from 2004 to 2007. The Committee, however, are dismayed to note that the position has not improved with the introduction of 'capital subsidy scheme', which has replaced the cumbersome 'interest subsidy scheme' in December, 2006. The very fact that BE (2007-08) had to be reduced by more than 25% from Rs. 40.00 crore to Rs. 29.00 crore and the actual expenditure of a mere Rs. 10.85 crore could be made out of the already scaled down RE in the first ten months of the current financial year only confirms the lackadaisical approach of the Government in the matter of giving a fillip to the programme which has an estimated potential of 15,000 MW. In the opinion of the Committee, an element of professionalism needs to be built into the system for effective implementation of the Schemes. In view of the fact that the replacement of the old 'interest subsidy scheme' with a new 'capital subsidy scheme' has done precious little in the direction of optimal utilization of funds, the Committee recommend that the Ministry should conduct a thorough review of the scheme in all its ramifications and rectify all the problems related to releasing of the Capital Subsidy so that the finances allocated for BE 2008-09 are optimally and judiciously utilized and the targets projected for the year are fully achieved. The Committee would like to be apprised of the action taken in this regard.

Reply of the Government

Financial year 2007-08 was the first year of implementation of the new capital subsidy scheme. As per the scheme, the capital subsidy is to be released after completion of the project and subsequent independent evaluation of each project by a designated organization in terms of the continuous performance as per DPR parameters for a period of 90 days. The required system was put in position during 2007-08 for meeting the requirements for releasing the capital subsidy for completed projects and for the ongoing bagasse co-generation projects in cooperative sector sugar mills. As the same terms and conditions of the scheme are continued during 2008-09 for release of subsidy, the funds allocated for the scheme would be utilized in full during 2008-09.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 26)

The Committee further observe that by the end of 2005-06, interest subsidy could not be released for several matured biomass power/co-generation projects due to cancellation of Power Purchase Agreement

(PPAs) as the matter was referred to the Regulators. In view of the fact that no much headway in harnessing the huge potential of biomass has been achieved in the country and the completed projects were not provided with their eligible subsidy, the Committee are of the view that a wrong signal has been conveyed to the project promoters. While expecting that the Government might have gone into the details of the reasons for cancellation of PPAs signed by the State Government, the Committee recommend that such cancellation of PPAs should not be repeated and elaborate steps be taken in advance by the Government to prevent such eventualities. The Committee further recommend that all potential States should also be requested to issue attractive preferential tariff for wheeling and third party sale from Biomass Power/Cogeneration Projects.

Reply of the Government

The matter related to cancellation of PPAs for biomass power projects by KPTCL has been resolved and interest subsidy released to the eligible projects during 2006-07.

The subject of issuing attractive preferential tariff, wheeling and related issues is of quasi-judicial nature in the implementation of which this Ministry has no direct role. Even then this Ministry has been taking up such matters with the State Government from time to time depending upon the facts and circumstances of the cases. 13 major States, which have potential for generating power from biomass have already announced conducive policy for procurement of electricity from biomass projects.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 27)

The Committee observe that the R&D expenditure during the entire 10th Plan period has been a paltry Rs. 7.56 crore and during the last three years of the Plan period, the expenditure has gone down drastically. While the first two years of the Plan registered R&D expenditure of Rs. 4.96 crore, the last three years resulted in a cumulative expenditure of Rs. 2.60 crore only. As the R&D activities hold the key to solving operational and technical problems associated with the programme and ushering in new and better technologies, the Committee are distressed to point out that the expenditure on R&D for the Biomass Power/Cogeneration Programme during the 10th Plan has been rather negligible. The Committee, therefore, desire that utmost importance should be attached to the R&D activities for Biomass Power/Cogeneration Programme and expect that the amount of Rs. 4 crore which has been allocated for the year 2008-09 for R&D support on Biomass Power/

Co-generation and gasification would be fully expended. The Committee further recommend that suitable incentives should be given to the scientists who make significant breakthroughs which would not only motivate the scientists to work more diligently but also give a boost to the R&D Programme.

Reply of the Government

An action plan for incurring the entire allocated amount of Rs. 4 crore for R&D during 2008-09 has been drawn up, discussed and reviewed in the Ministry. As many as 14 new R&D projects have been recommended and are at various stages of sanction/implementation. Most of these projects are being taken up with financial participation from the associated industries and institutions. The scientists working on these R&D projects are encouraged to obtain patents on the outcome of the projects and transfer technologies to the interested parties.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 29)

The Committee observe that the RVEP of the Ministry aims at providing basic lighting/electricity facilities through renewable sources in those un-electrified remote villages and hamlets where grid connectivity is either not feasible or not cost effective. The Ministry are implementing the programme in all those villages which are identified by Rural Electrification Corporation (REC) as remote and for which proposals are submitted by the State implementing agencies. The Committee find that one of the major problem areas for implementation is that States change their plans, even after confirmation regarding remoteness of a village by REC and take up for grid electrification. This is attributed to the fact that normally grid connectivity is preferred over energy from renewable programmes. While observing that the REC figures of 3113 and 520 remote villages in Jharkhand and Orissa were subsequently slashed down to 520 and 20 villages, the Committee feel that the system of identification of remote villages being followed now has inherent contradictory problems and requires a more practical and realistic approach to succeed. The Committee have been given to understand that REC does not have the requisite machinery to physically verify whether any village can be electrified or not by providing grid connectivity and is solely dependent on the Project Reports being submitted under Rajiv Gandhi Grameen Vidyutikaran Yojana. Since, RVEP is exclusively funded through the MNRE budget, it is the onerous responsibility of the Administrative Ministry to ensure that the programme implementation does not suffer on account of these procedural bottlenecks. It is high time for the Ministry to address

the issue and find a lasting solution. One possible course of action could be to obtain list of villages directly from the concerned State Governments without involving REC in the identification process. The Committee recommend the Ministry to consider the issue from all angles and adopt a pragmatic procedure immune from existing drawback. The precise action taken in the matter be intimated to the Committee.

Reply of the Government

The procedure being followed for identification of remote villages through REC is only with a view to avoid duplicity of funding for the same villages under the two different Central Government programmes: Rajiv Gandhi Grameen Vidyutikaran Yojana and Remote Village Electrification Programme.

It is true that the above procedure adds to some delay in receipt of proposals. However, the Ministry has actively coordinated the matter with the REC to streamline the procedure and minimize the delays. The Ministry sanctioned all the proposals received from States during 2007-08 by 31.3.2008 and no proposals were kept pending.

The slashing down of the number of remote villages by the States for adding to the coverage under RGGVY does lead to reduced achievements under the RVE programme. However, the overall goal of the Government of providing electricity/lighting to all villages does not suffer much as the villages get covered under at least one of the programmes. Nonetheless, the Ministry has been requesting the State Governments repeatedly to finalize the list of remote villages in one go rather than in piece-meal manner. The same will help to hasten the programme implementation.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 31)

The Committee find that the Ministry have put forth several proposals for rationalization/reduction/abolition of taxes/duties being levied on various equipment and materials used in the renewable energy sector. In this regard, the Committee feel that exemption of 4 per cent Additional Counter Vailing Duty (ACVD) on import of raw material, component and parts for manufacturing of wind electricity generators should be allowed as all other industries are allowed to set off the 4 per cent ACVD. Further, to give a level playing field to all wind energy manufacturers, the Committee feel that exemption of Excise Duty/CVD as presently given for epoxy resins should also be given to polyester resin for manufacture of rotor blades.

Reply of the Government

These proposals, which formed part of the Ministry's annual budget proposals for 2008-09, did not then get accepted in the Ministry of Finance. These will be reiterated in the budget proposals for 2009-10.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 32)

The Ministry have proposed inclusion of 'permanent magnets' for manufacture of permanent magnets synchronous generators of high generation power capacities above 500 KW for use in wind electricity generators, in the list of parts of WEGs attracting a concessional customs duty of 5%. The Committee understand that as of now these magnets are not available in India and are imported. The Committee are of the opinion that such a concession will go a long way in promoting indigenous production of permanent magnets synchronous generators for use in wind turbines for induction of latest advanced technology in the country. The Committee, therefore, desire that the Government should give a serious thought to this proposal.

Reply of the Government

The proposal will be reiterated in the Ministry's budget proposals for 2009-10.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 33)

The Committee also endorse the Ministry of New and Renewable Energy's proposal that small biomass power projects such as those taken up in distributed generation mode for electrification of villages should also be given concessions in Custom and Excise Duties which at present are available to those power projects used for selling electricity to grid. Further, to encourage production and use of ethanol for reducing dependence on import of crude oil for meeting the energy requirements, the Committee feel that existing duty on ethanol of 16% may be reasonably brought down to bring domestically procured ethanol at least on par with the imported ethanol.

Reply of the Government

Both these proposals will be reiterated in the Ministry's budget proposals for 2009-10.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 34)

The Committee observe that the anomalies existing in duty structure on Solar Photo Voltaic (SPV) Sector are even more glaring. The Committee find that the present duty structure is totally loaded against indigenous manufacture of SPV modules. A complete SPV module when imported invites no duty, whereas when components of SPV module are separately imported by indigenous manufacturers, an import duty of 16% is imposed making the locally manufactured SPV module totally incompetent *vis-a-vis* the imported ones. The Committee would like the Government to consider immediate relief measures in the interest of local industry.

Reply of the Government

The proposal will be reiterated to the Ministry of Finance in the budget proposals for 2009-10.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Recommendation (Para No. 35)

The Committee also find the proposal of the Ministry for income tax rebate on domestic installation of Solar Water Heaters worth considering. This one time rebate of Rs. 20,000 in computation of Income Tax in the year of purchase of Solar Water Heater will be a very welcome step in promoting solar energy appliances in the country. It is, therefore, but imperative that the Government give a positive consideration to this proposal in the long term perspective of energy conservation and use of cleaner energy. The Committee would like to be apprised of the decision on all these proposals at the earliest.

Reply of the Government

The proposal, which formed part of the Ministry's annual budget proposals for 2008-09, did not then get accepted in the Ministry of Finance. It will be reiterated in the budget proposals for 2009-10.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

CHAPTER III

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

Recommendation (Para No. 4)

The Committee note that the approved Gross Budgetary Support (GBS) for the 10th Plan (2002-03 to 2006-07) was to the tune of Rs. 4000 crore including a provision of Rs. 400 crore for North-East Region. The consolidated BE for the five plan periods stood at Rs. 3046.25 crore and the RE for the same period was of the order of Rs. 1988.44 crore. It is a matter of concern that against a downsized RE of Rs. 1988.44 crore, the actual expenditure during the period amounted to only Rs. 1717.51 crore, which obviously is indicative of sub-optimal utilization of approved allocation. A review of physical performance during the period reveals that while the Ministry have done exceedingly well in sectors like Wind Power, Small Hydro and Biomass Power/Cogeneration, the performance in areas of Solar Photovoltaic and Solar Thermal Energy Programmes woefully lagged behind.

Reply of the Government

The performance in the area of the Solar energy covering Solar Photovoltaic and Solar Thermal has lagged behind mainly because of the relatively higher cost and poorer techno-economic viability of solar power generation technologies compared to wind power, small hydro power and biomass power/cogeneration given the current state of development of these technologies.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

CHAPTER IV

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

Recommendation (Para No. 10)

Taking note of the vision and mandate of the Ministry of New and Renewable Energy, the Committee place on record the fact that an uphill task is on the cards for years to come. In this context, the Committee pondered over a possible conceptional change in regard to the ultimate use of energy drawn from renewable sources. The Committee find that approach so far has been to use renewable energy as a substitute for conventional energy, which sooner or later would face a consumer resistance primarily on economic grounds. There is no denial of the fact that conventional energy is preferred to renewable energy. In this scenario, the Committee opine that there need to be a new approach to consider renewable energy not as a substitute but as an additional, as a parallel, as a stop gap and as a superior energy because it is in the national interest. At this stage, the Committee put it as a poser and certainly would await a response from the Government as to how this can be translated into a policy change.

Reply of the Government

It is an action imperative for the country to pursue all energy options— conventional, renewable and nuclear— to achieve its long term goals of energy security and energy independence. The Integrated Energy Policy Report of the Expert Committee constituted by Planning Commission has attempted to lay down a road map in this regard and the same is under consideration of the Government. In so far as Renewable Energy is concerned, the endeavor of the Ministry will continue towards lowering the costs and improving the reliability of various renewable energy systems through support to sustained R&D efforts. The Ministry will attempt conceptual clarity in the framework document to be prepared for the proposed Solar Mission.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Comments of the Committee

(Please see Para No. 11 of Chapter-I of the Report)

Recommendation (Para No. 11)

The Committee observe that in spite of mature and proven technology available for wind energy and active involvement of private sector, against an estimated potential of 45,000 MW of wind power in the country, the present installed capacity is only 7,938 MW as of January, 2008. A scrutiny of relevant data reveal that the original allocation of Rs. 21.00 Crore for wind energy programme was revised to Rs. 15.50 Crore at the RE stage during the year 2007-08. Further, against the reduced allocation, the expenditure incurred upto January, 2008 was only Rs. 5.40 Crore. The Committee are dismayed to find that the Ministry also failed to achieve the envisaged target and the shortfall was to the extent of 655 MW. The Committee take strong objection to the reasons adduced by the Ministry in this regard, which are not only of a generalized nature but also repetitive in character. In the aforesaid background, the Ministry certainly need to focus their attention on this grey area and take remedial steps to reverse the undesirable trend. In the opinion of the Committee, lack of initiative and zeal in implementing and monitoring projects and resolving unanticipated problems, lowering of allocation at RE stage coupled with subsequent shortfall in utilization of funds are apparent factors for non-achievement of the planned targets. The Committee recommend that progress on projects and expenditure position need to be improved in the current period to achieve the target of 2,000 MW grid-interactive power capacity addition from Wind Power fixed for 2008-09.

Reply of the Government

A combined reply is given under Question No. 12.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Comments of the Committee

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

Recommendation (Para No. 18)

The Committee appreciate the new initiative of the Ministry to promote installation of mega-watt scale solar power generation plants of a minimum capacity of 1 MW. The Ministry has earmarked Rs. 14 Crore for 2008-09 for this programme to achieve capacity installation of 14 MW.

In this backdrop, the Committee recommend that the cap set for the promotion of grid interactive mega-watt scale solar power generation programme be suitably reviewed to encourage interested States like Rajasthan so that the Budgetary support of Rs. 14 crores (BE) for 2008-09 is fully utilized. The Committee also recommend that the Ministry may alternatively explore possibility of sponsoring one of the mega-watt scale demonstration project in the premises of Solar Energy Centre to get proper feedback/evaluation of the programme.

Reply of the Government

The Ministry is of the view that the targets announced under the demonstration programme may continue to be implemented and initial performance data be collected on megawatt size grid connected power plants. This may not be linked to review of the scheme including removal of cap. The States, which have announced separate tariff for solar power, can implement solar power projects outside the demonstration programme of the Ministry. There is no restriction to take up projects by such States. A 2 MWp capacity solar PV power plant is being set up in West Bengal. The other States are also expected to clear projects for support under the demonstration programme. The recommendation of the Committee to set up one of the MW-scale solar power plants in the premises of SEC for getting feedback/evaluation of the programme has been noted. Under the proposed Solar Mission, it is proposed to upscale the quantum of solar generated electricity.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Comments of the Committee

(Please see Para Nos. 23 & 24 of Chapter-I of the Report)

Recommendation (Para No. 20)

The Committee had expressed deep concern during evidence over the absence of proper follow-up and maintenance mechanism subsequent to installation of various solar devices under the solar Photovoltaic Programmes of the Ministry. The Committee drew the attention of the Ministry to the consequential difficulties faced by the consumers in the event of failure of the devices, in the absence of a reliable and long-term service back up. The Committee observe that in such a scenario, the confidence level of users is very low and functional reliability of the various systems is in question. In this context, the Secretary, MNRE assured the Committee that a maintenance support mechanism will be built into the system for redressing the post-installation problems faced by the users. The Committee would like to be informed of the precise action taken in the matter.

Reply of the Government

The programmes of the Ministry have a provision of Annual Maintenance Contract for 5 years for the SPV systems, including 2 years warranty on the complete systems. The State agencies are expected to monitor the progress before they release funds for AMC to system suppliers on annual basis. The agencies will be requested to strengthen the existing after sales service network through Akshaya Urja shops and the service centers set up by the manufacturers which are involved in the supply of the systems.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Comments of the Committee

(Please see Para No. 27 of Chapter-I of the Report)

Recommendation (Para No. 21)

The Committee observe that against an allocation of Rs. 17.5 crore for Research and Development (R&D) during past three years for solar energy sector, only Rs. 1.44 crore could be expended in this direction. Notwithstanding the reasons advanced for meagre spending in this area, the Committee are of the firm view that the Ministry should focus their attention in a big way on R&D investment in solar energy. The Committee emphasize that vision should be beyond the photovoltaic technology to enhance efficiency and for that matter the Ministry need to venture technology collaboration with leading players in the field across the globe. The basic idea is that the Ministry should make intensive efforts to adopt the mature and proven technology globally available for solar energy to make solar power cost-competitive and commercially viable. The Committee believe that breakthrough in this field would support the Ministry in a big way in their pursuit to bring down the cost of solar energy generation compared to that from conventional sources.

Reply of the Government

The global efforts in the solar power generation are to achieve technological breakthroughs to significantly reduce the cost through both solar photovoltaic and solar thermal routes. Several technology options are emerging, however, no proven option is available to give cost competitive and commercially viable solar energy technologies. The focus of the R&D efforts during the 11th plan is to support development of solar energy technologies, which could lead to improvements in the performance and cost reduction. The recently announced demonstration programme for grid interactive solar power projects encourages project

developers to use efficient technologies that could be available nationally and globally to achieve cost competitiveness of the projects, and thereby leading to introduction of the advanced technologies in the country. Under the Solar Mission, an R&D strategy will be proposed after consultation with experts.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Comments of the Committee

(Please see Para No. 30 of Chapter-I of the Report)

Recommendation (Para No. 24)

The Committee are concerned to find that in some States only a very small quantum of identified SHP potential has been tapped so far. A scrutiny of relevant data reveals that the ratio of installed capacity of SHP projects to potential availability in the States of Arunachal Pradesh, Chhattisgarh, Himachal Pradesh, Jharkhand, Orissa and Uttarakhand is very dismal. The committee would like to be apprised of the reasons for such abysmal performance in respect of these States and measures taken to improve level of achievement. The Committee are given to understand that the private developers for small hydro projects are not facing any genuine problem in selling power generated from small hydel projects as tariff has been fixed by the State Electricity Regulatory Commissions (SERCs) for sale of electricity. However, the Committee find that in some States, developers feel that the purchase price is very low. The Committee therefore, recommend that Ministry, should take up the matter with all States and Union Territory having potential for SHP projects for fixing preferential tariff for hydro power as have been done by SERCs in Andhra Pradesh, Himachal Pradesh, Karnataka, Maharashtra, Chhattisgarh and Punjab for promotion/development of new SHP projects. The Committee, therefore, desire that the Ministry should have better coordination with the States to give a major fillip to this programme.

Reply of the Government

The present position w.r.t. SHP development in the cited States is as under:—

- In the State of Chhattisgarh, Himachal Pradesh and Uttaranchal, SHP development is mainly through private sector participation. In Chhattisgarh, 58 SHP projects aggregating to 500 MW have been allotted to private developers. These projects are likely to come up in next two years.

- In Himachal Pradesh, 110 projects aggregating about 350 MW have been allotted to the private developers, of which 18 projects have been commissioned and 20 more projects are scheduled to be completed during 2008-09.
- In Uttaranchal, about 30 projects stand allotted, of which 6 projects have been completed. The State Government has recently revised its policy and it is expected that more projects would get commissioned in the State in next 2-3 years.
- The Ministry is paying special attention to tap the hydro potential in Arunachal Pradesh. 72 SHP projects with a total capacity of over 90 MW are under implementation in the State. It may be mentioned that Hon'ble Prime Minister has announced a special package of Rs. 550 crore for the development of small hydro and installation of solar photovoltaic systems for electrification/illumination of border areas in Arunachal Pradesh. Recently, Arunachal Pradesh has also announced a policy for inviting private sector to setup SHP projects.
- Government of Orissa has announced policy for private sector participation to develop SHP projects. The first private sector project of 20 MW capacity is likely to be commissioned by September 2008.
- 8 SHP projects aggregating 34.85 MW are under construction in the State of Jharkhand.

With regard to low tariffs in some States, the Ministry has been interacting with various SERCs for giving preferential tariff to renewable energy based power projects including small hydro. More recently, it is working with the Central Electricity Regulatory Commission for evolving specific guidelines for the pricing of renewable power. The same when announced would help in bringing uniformity in tariff fixation across the States.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21-07-2008]

Comments of the Committee

(Please see Para Nos. 33, 34 & 35 of Chapter-I of the Report)

Recommendation (Para No. 28)

The Committee note with concern the poor achievements *vis-a-vis* the targets fixed for Remote Village Electrification Programme (RVEP) during the 10th Plan period where against a sanctioned target of

5163 villages, only 2860 villages could be electrified and a sum of Rs. 247.33 crore was utilized against an allocation of Rs. 735 crore. For the 11th Plan, the Ministry have earmarked an outlay of Rs. 650 crore to cover 9000 villages. However, the Committee observe that although in the first year of the 11th Plan (2007-08), 2000 villages/hamlets were targeted to be covered under the programme at a cost of Rs. 108 crore, the allocation at RE stage was drastically pruned down to Rs. 75 crore. Further, upto 31st January, 2008, *i.e.*, ten months of the financial year, only 453 villages have been reported to be electrified at the cost of Rs. 45.60 crore. Pertinently, 25% of the targeted villages have been covered while spending 60% of the allocated funds during 2007-08. In view of the poor achievements for the programme during 10th Plan period and during 2007-08, the Committee recommend that the Government should take effective steps so that the targets for the Annual Plan 2008-09 to electrify 1500 villages at the cost of Rs. 80 crore and total target to cover 9,000 villages during the 11th Plan at the cost of Rs. 650 crore would be achieved.

Reply of the Government

The position with respect to the target and achievements for the 10th Plan is as follows:

Target for coverage of remote villages for the Plan period	: 5000 villages
No. of villages for which support has been sanctioned	: 5163 villages
No. of villages where work was completed by March, 2007	: 2860 villages
No. of villages where work was ongoing as on 31.3.2007	: 2303 villages
No. of villages where work has been completed by March, 2008	: 1280 villages

Thus, it can be observed that the Ministry had over-achieved the target for sanctioning of support for the Plan period. Further, the implementation at the ground level is the responsibility of the State implementing agencies, most of which are, unfortunately, highly understaffed. The Ministry has been persistently requesting the States to strengthen their implementation machinery and a substantial service charge is also being provided so that financial constraints, if any, could be overcome.

During 2007-08, against a target of providing support for 2000 villages, the Ministry approved support for 1992 villages and hamlets. Against a BE of Rs. 143 crores and a RE of Rs. 110.55 crore, the actual expenditure was Rs. 133 crores. It may be mentioned that the expenditure figures would have reached BE level but for non-availability of funds due to cuts in the Ministry's budget.

The programme provisions are being reviewed for suitable modifications for more effective implementation during the remaining period of the 11th Plan.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21.07.2008]

Comments of the Committee

(Please *see* Para No. 38 of Chapter-I of the Report)

Recommendation (Para No. 30)

The Committee observe that the idea of setting up of the District Advisory Committees (DACs) was to strengthen efforts of the Government in creating mass awareness and improve the existing delivery system for deployment of renewable energy systems/devices. In all, 560 DACs have been set up so far with the above objectives in mind. The Committee are, however, constrained to find that the DACs in most of the States are non-functional as regular meetings thereof are not convened. Taking strong exception to this sordid state of affairs, the Committee emphasize that urgent action be initiated by the Ministry to ensure that DACs are made functional and carry out the assigned job to fulfil the desired objectives. The Committee would like to be informed of the steps taken in this regard and the performance status of these DACs.

Reply of the Government

In order to motivate the States about organizing DACs meetings regularly and effectively, the Orientation-cum-training programmes for district authorities and DAC members have been organized in eleven States namely, Assam, Andhra Pradesh, Maharashtra, Uttar Pradesh, Haryana, Uttaranchal, Madhya Pradesh, Orissa, Kerala, Sikkim and Rajasthan. Further, regular follow-ups have been carried out with States and Districts for organizing the meetings of DACs regularly. The reports of meetings of DACs have been received from 181 districts. Further, to educate the DAC members with the latest developments on renewable energy, their visits are also organized at Solar Energy Centre of this Ministry as per request of the States.

[Ministry's O.M. No. 8/1/2008-P&C, dated 21.07.2008]

Comments of the Committee

(Please *see* Para No. 41 of Chapter-I of the Report)

CHAPTER V

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

— NIL —

NEW DELHI;
27 January, 2009
7 Magha, 1930 (Saka)

GURUDAS KAMAT,
Chairman,
Standing Committee on Energy.

APPENDIX I

MINUTES OF THE SEVENTH SITTING OF THE STANDING COMMITTEE ON ENERGY (2008-09) HELD ON 27TH JANUARY, 2009 IN COMMITTEE ROOM 'C', PHA, NEW DELHI

The Committee met from 1100 hrs. to 1150 hrs.

PRESENT

Shri Jesudasu Seelam — *In the Chair*

MEMBERS

Lok Sabha

2. Smt. Susmita Bauri
3. Sardar Sukhdev Singh Libra
4. Shri Sanat Kumar Mandal
5. Shri Rabindra Kumar Rana
6. Shri Tarit Baran Topdar

Rajya Sabha

7. Dr. Bimal Jalan
8. Shri Prakash Javadekar
9. Shri Sayed Azeez Pasha
10. Shri Shivpratap Singh
11. Shri Veer Pal Singh Yadav

SECRETARIAT

1. Shri Raj Kumar — *Deputy Secretary*
2. Shri Shiv Kumar — *Deputy Secretary*
3. Shri Rajesh Ranjan Kumar — *Deputy Secretary-II*

2. In the absence of the Chairman, the Committee chose Shri Jesudasu Seelam, a Member of the Committee, under Rule 258(3) of the Rules of Procedure and Conduct of Business in Lok Sabha, to act as Chairman for the sitting. The acting Chairman welcomed the Members of the Committee to the sitting. The Committee then took up for consideration/adoption the following draft Reports and adopted the same without any amendment/modifications:

- (i) Draft Report on the subject "Role of CERC and SERCs in the Protection of Interests of Consumers".
- (ii) Draft Report on Action Taken on recommendations contained in the 22nd Report of the Committee on the subject "Ultra Mega Power Projects".
- (iii) Draft Report on Action Taken on the recommendations contained in the 25th Report of the Committee on Demands for Grants of the Ministry of Power for the year 2008-09.
- (iv) Draft Report on Action Taken on the recommendations contained in the 26th Report of the Committee on Demands for Grants of the Ministry of New and Renewable Energy for the year 2008-09.

3. The Committee authorised the Chairman to finalize the Reports and present 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-SIXTH REPORT OF STANDING COMMITTEE ON ENERGY (14TH LOK SABHA)

(i)	Total number of Recommendations	35
(ii)	Observations/Recommendations which have been accepted by the Government: SI. Nos. 1, 2, 3, 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17, 19, 22, 23, 25, 26, 27, 29, 31, 32, 33, 34 and 35 Total : Percentage :	 26 74.29%
(iii)	Observations/Recommendations which the Committee do not desire to pursue in view of the Government's replies: SI. No. 4 Total : Percentage	 01 2.86%
(iv)	Observations/Recommendations in respect of which the replies of the Government have not been accepted by the Committee and which require reiteration: SI. Nos. 10, 11, 18, 20, 21, 24, 28 and 30 Total : Percentage	 08 22.85%
(v)	Observations/Recommendations in respect of which the final replies of the Government are still awaited: Total : Percentage	 00 00

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