

**35**

**STANDING COMMITTEE ON  
ENERGY  
(2003)**

**THIRTEENTH LOK SABHA**

**MINISTRY OF NON-CONVENTIONAL  
ENERGY SOURCES**

**DEMANDS FOR GRANTS (2002-2003)**

*[Action Taken by the Government on the Recommendations  
contained in the Twenty-eighth Report of the Standing  
Committee on Energy (Thirteenth Lok Sabha)]*

**THIRTY-FIFTH REPORT**



**LOK SABHA SECRETARIAT  
NEW DELHI**

*February, 2003/Magha, 1924 (Saka)*

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**COMPOSITION OF THE STANDING COMMITTEE  
ON ENERGY  
(2003)**

Shri Sontosh Mohan Dev *Chairman*

**MEMBERS**

*Lok Sabha*

2. Shri Basudeb Acharia
3. Shri Prasanna Acharya
4. Shri Prakash Yashwant Ambedkar
5. Shri Vijayendra Pal Singh Badnore
6. Shri B. Satyanarayana
7. Shri Jagmeet Singh Brar
8. Shri Lal Muni Chaubey
9. Shri Bal Krishna Chauhan
10. Shri A.B.A. Ghani Khan Choudhury
11. Shri Bikash Chowdhury
12. Shri Laxman Giluwa
13. Dr. S. Jagathrakshakan
14. Shri P.R. Khunte
15. Shri Arun Kumar
16. Shri Subodh Mohite
17. Shri K. Muraleedharan
18. Shri Ali Mohmad Naik
19. Shri Ravindra Kumar Pandey
20. Shri Dalpat Singh Parste
21. Shri Amar Roy Pradhan
22. Shri Harpal Singh Sathi
- \*23. Md. Shahabuddin
24. Shri Raghuraj Singh Shakya

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\*Nominated of the Committee w.e.f. 24.1.2003

(iv)

25. Shri Manoj Sinha
26. Shri Chandra Pratap Singh
27. Shri Tilakdhari Prasad Singh
28. Shri Shibu Soren
29. Shri B. Venkateshwarlu
30. Prof. Ummareddy Venkateswarlu

*Rajya Sabha*

31. Shri Devdas Apte
32. Shri Santosh Bagrodia
33. Shri S.M. Laljan Basha
34. Shri Jayanta Bhattacharya
35. Shri Dara Singh Chauhan
36. Shri Aimaduddin Ahmad Khan (Durru)
37. Shri Ajay Maroo
38. Shri B.J. Panda
39. Shri Matilal Sarkar
40. Shri Gaya Singh
41. Shri Veer Singh
42. Shri D.P. Yadav
43. Vacant
44. Vacant
45. Vacant

SECRETARIAT

- |                       |                                |
|-----------------------|--------------------------------|
| 1. Shri John Joseph   | <i>Additional Secretary</i>    |
| 2. Shri P.K. Bhandari | <i>Director</i>                |
| 3. Shri R.S. Kambo    | <i>Under Secretary</i>         |
| 4. Shri N.K. Jha      | <i>Sr. Committee Assistant</i> |

COMPOSITION OF THE SUB-COMMITTEE 'F' ON  
ACTION TAKEN REPORTS

Shri Sontosh Mohan Dev — *Chairman*

MEMBERS

2. Shri Talakdhari Prasad Singh — *Convenor*
3. Shri Basudeb Acharia
4. Shri Prakash Yashwant Ambedkar
5. Shri Vijayendra Pal Singh Badnore
6. Shri Santosh Bagrodia

## INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorised by the Committee to present the Report on their behalf, present this 35th Report on the Action Taken by the Government on the recommendations contained in the 28th Report of the Standing Committee on Energy on Demands for Grants (2002-03) of the Ministry of Non-Conventional Energy Sources.

2. The Twenty-eighth Report of the Standing Committee on Energy was presented to Lok Sabha on 23rd April, 2002. Replies of the Government to all the recommendations contained in the Report were received on 8th November, 2002.

3. The Sub-Committee on Action Taken Reports as well as Standing Committee on Energy considered and adopted this Report at their sitting held on 14th February, 2003.

4. An analysis of the Action Taken by the Government on the recommendations contained in the Twenty-eighth Report of the Committee is given at Annexure-III.

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;  
February 14, 2003  
Magha 25, 1924 (Saka)

SONTOSH MOHAN DEV,  
*Chairman,*  
*Standing Committee on Energy.*

## CHAPTER I

### REPORT

The Report of the Committee deals with the action taken by the Government on the recommendations contained in the Twenty-Eighth Report (Thirteenth Lok Sabha) of the Standing Committee on Energy on "Demands for Grants (2002-2003) of the Ministry of Non-Conventional Energy Sources" which was presented to Lok Sabha on 23rd April, 2002.

2. Action Taken Notes have been received from the Government in respect of all the recommendations contained in the Report. These have been categorised as follows :—

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

Sl. Nos. 1, 2, 3, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 25, 26, 27, 28 and 29.

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

Sl. Nos. 6, 7, 8 and 9.

- (iii) Recommendations/Observations in respect of which reply of the Government has not been accepted by the Committee:

Sl. Nos. 5 and 22.

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

Sl. Nos. 4, 20, 21, 23 and 24.

3. The Committee desire that final reply in respect of the recommendation for which only interim reply have been given by the Government should be furnished to the Committee at the earliest.

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

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

A. Uniform Realisation of Internal and Extra Budgetary Resources (IEBR)

**Recommendation (Sl. No. 1, Para No. 2.13)**

6. The Committee expressed their concern over under-utilization of the IEBR component over the years. A large component of the Central Plan outlay of the MNES was derived from the Internal and Extra Budgetary Resources (IEBR). The realization of IEBR ranged from 44 to 59 per cent since 1998-99. There had always been a great variation between the Budgeted Estimates, Revised Estimates and the Actuals. The Committee, therefore, desired that MNES should project a realistic and achievable IEBR, so that the plans and programmes of the Ministry did not go haywire. The Committee also desired that the realization of IEBR be uniformly spread over the year so that there was no occasion for the Ministry of Finance to impose any cut at RE stage.

7. The Ministry of Non-Conventional Energy Sources (MNES) in their Action Taken reply, have stated that IREDA—a PSU of this Ministry, which mainly deals with IEBR—has been asked to rationalize the estimation of IEBR during the financial year 2002-03. The following important steps were taken by IREDA, for making realistic IEBR Projections: (i) to obtain cash flow projections from the borrowers for estimated disbursement; (ii) to obtain quarterly projections regarding disbursement from IREDA in respect of Projects being funded out of international line of credit; (iii) concurrent engineers/auditors for high



value projects to monitor physical and financial progress of the projects and projections regarding disbursement had been appointed by the IREDA besides the periodic inspection of the projects is also taken by IREDA officials which also helps in estimating the quantum of disbursement; (iv) an additional incentives for timely completion of the projects is provided *i.e.*, "Grid connected power projects financed under Project financing category if completed ahead of schedule as originally agreed/stipulated in the loan sanction letter without any cost overrun will be sanctioned one time Performance Reward equivalent to 0.25% of total loan disbursed"; (v) 0.5% reduction in interest rate, for projects to be funded out of international line of credits, was provided which helps in timely utilization of international line of credits matching with the estimates of disbursements projected; (vi) periodic reviews were undertaken by IREDA and the Ministry and also by international lenders for the projects funded through international line of credits; and (vii) IREDA does not, as a matter of policy, finance cost over runs in the projects. This motivates the borrowers to complete their projects in time and thus adhere to the projections given by them. However, efforts will continue to be made to realise the IEBR uniformly during the year, as projected in the Budget. During 2002-03, an amount of Rs. 476.48 crores against IEBR had been earmarked which is expected to be fully utilized.

8. The Committee have taken note of the various steps taken by Ministry of Non-Conventional Energy Sources (MNES) through Indian Renewable Energy Development Agency (IREDA) — a PSU of the Ministry of Non-Conventional Energy Sources (MNES) in connection with uniform realisation of Internal and Extra Budgetary Resources (IEBR) during the financial year 2002-2003. The Committee have also noted the assurance given by the Ministry for the utilizations of the entire amount of Rs. 476.48 crore, earmarked for IEBR during the financial year 2002-2003. The Committee, while welcoming the efforts made by Government in this direction, are still sceptical about the uniform realisation of the IEBR spreading over the financial year 2002-2003, in view of the past track record of the Ministry. The Committee, therefore, recommend that the

Government should continue their efforts to realise the projected IEFR uniformly during the financial year 2002-2003. The Committee would like to be apprised of the final outcome in this regard. The Committee would, however, like to emphasise that Government nominee on Board of Directors of IREDA, should take proactive role to ensure that budgetary allocations are made on a realistic basis. At the same time, the Committee desire that there is a need to simplify and rationalise budgetary management exercise for ensuring greater transparency in the system.

**B. Concessions required for Non-Conventional Energy related items**

**Recommendation (Sl. No. 5, Para No. 2.17)**

9. Expressing their satisfaction over removal of Counter-Vailing Duty on import of raw materials required for manufacturing of blades of Wind Electric Generators (WEGs) and exemption of basic duty on import of certain capital equipment required for manufacture of Solar Photovoltaic Cells/Modules, the Committee had urged that in the interest of sustaining the growth of non-conventional energy sector, customs duty on import of components used in PV system be brought down to 15%, and Import Duties on the Biogas engine-sets of capacity 1 MW and above, used in waste-to-energy conversion project be removed. The Committee had also desired 5% duty on import on : (i) tempered glass used in solar thermal collectors, and (ii) thin aluminium sheet used in solar cookers be levied. Moreover, the existing 100% accelerated depreciation benefit be allowed to continue.

10. The Ministry of Non-Conventional Energy Sources in their Action Taken reply have stated that they will take up the matter about removal of reduction in customs duties as suggested by the Committee again with the Ministry of Finance during the exercise for budget proposals for 2003-2004. As regards to 100% accelerated depreciation, MNES has stated that Ministry of Finance has to reduce it to 80%,

despite the Ministry's strong recommendation to continue the 100% depreciation.

11. The Committee are surprised to note the lackadaisical approach of Ministry of Finance, in not acceding to the recommendation of the Committee in regard to reduction in duty of Renewable Energy Sources products. In this context, the Committee would like to remind that on the one hand, Government have resolved to source 10% power from renewable sources and on the other hand, the retrograde action taken by Ministry of Finance. Such a resolve will remain a distant dream and in fact, the share of renewables may further dip to less than 5%. Further, reduction in accelerated depreciation benefits may have a long term deleterious effect on renewable energy. The Committee, while reiterating their earlier recommendation, desire that Ministry of Non-Conventional Energy Sources (MNES) should prevail upon the Ministry of Finance and apprise the final outcome thereof to the Committee.

**C. Renewable Energy Sources Programmes in the North-Eastern States including Sikkim**

**Recommendation (Sl. No. 12, Para No. 2.62)**

12. The Committee expressed their concern over the State of Renewable Energy Sector in North-Eastern States in spite of 10% MNES total Domestic Budgetary Support (DBS) being made available to these States. Unfortunately, no investment was made in the States of Arunachal Pradesh, Assam, Manipur, and Nagaland and still shocking is the fact that in all the other States, less than 50 percent of the allocated funds were utilized during the year 2001-2002. The Committee had also found that none of the North- Eastern States accepted the targets fixed for NPBD for want of matching State budget to meet the provision of State subsidy. The Committee had, therefore, recommended that the Government should vigorously pursue all the North-Eastern States to give top priority to all the

renewable energy sources programmes, specifically the programmes like NPBD.

13. The Ministry in their Action Taken Reply have stated that the Ministry had been taking all necessary steps to review the implementation of renewable energy programmes in the North Eastern States through review with the State Governments, regular visits of the officers of MNES and its regional office at Guwahati. During 7-8 May 2002, the Ministry organised an Annual conference to interact with all concerned quarters in which 25 participants from all North Eastern States participated. The review was undertaken at the level of Minister of State for Non-Conventional Energy Sources and all representatives were requested to accord top priority for implementation of the renewable energy programmes. Higher rates of central subsidies had been provided under solar photovoltaic, small hydro power, biomass gasification and biogas programmes in the North Eastern States. Regarding National Programme on Biogas Development, the higher rates of Central subsidy and turn-key job fee, which were enhanced in 2001-02 for North Eastern States, were being continued during 2002-03. A total target of over 7,000 plants had been planned for North Eastern Region States for 2002-03, against an achievement of 5,350 plants in 2001-02. It is proposed to pursue the matter at the level of Chief Ministers and Chief Secretaries.

14. The Committee have taken note of the various efforts undertaken by the Ministry to expedite the pace of all the renewable energy sources programmes including NPBD in all the North-Eastern States including Sikkim. Higher rates of Central subsidies have been provided for Solar Photovoltaic, Small Hydro Power, Biomass Gasification and Biogas Programmes and higher rates of Central subsidy and turn-key job fee for National Programme on Biogas Development in the North-Eastern States is to continue during the financial year 2002-2003. Despite all these efforts, together with expending 10% of MNES total Domestic Budgetary Support (DBS) for the promotion and development of various renewable energy sources programmes in North-Eastern Region, the results so far

achieved are far from satisfactory. Reiterating their earlier recommendation, the Committee strongly recommend that the Government should renew their efforts and strike at the root of the problems and pursue with all the North-Eastern States to accord top priority to the renewable energy sources programmes including NPBD. As the Government have decided to pursue the matter at the level of Chief Ministers and Chief Secretaries, the Committee desire that they be apprised of the follow-up action taken by each of the North-Eastern States including Sikkim in the matter.

#### **D. Solar Photovoltaic Programme (SPV)**

##### **Recommendation (Sl. No. 17, Para No. 2.88a)**

15. As lack of maintenance and after sale services especially of batteries, had affected Solar Photovoltaics Programme to a large extent, the Committee had recommended that a close liaison be established with the local Panchayats. Such bodies should certify the functionality of the system after every 3 months. The Committee also recommended that funds for the programme be contingent upon furnishing of functionality certificates by the Panchayats and such a Clause be ingrained in the warranty agreement itself.

16. The Government in their Action Taken reply have stated that the Ministry had always laid great emphasis on maintenance and after-sale services. The scheme guidelines of the Ministry provide for an Annual Maintenance Contract (AMC) for the Solar Photovoltaic Programme for a period of five years including the warranty period. The orders were to be placed only on companies which agree to offer such an AMC. Following the Committee's recommendation, a specific clause stating that "the payment of AMC charges should be contingent upon the functionality of the systems" has been incorporated in the scheme guidelines for 2002-2003.

17. The Committee took note of the various efforts made by the Government regarding the maintenance and after-sale service

of the batteries used in the various Solar Photovoltaic System. It is also found that a specific Clause where under the payments of Annual Maintenance Contract (AMC) are contingent upon the functionality of the system, has been incorporated in the scheme guidelines for 2002-2003. However, the Committee find that there is no authority/agency to certify the functionality of system. Reiterating their earlier recommendation, the Committee desire that the above stated specific Clause should be amended as "the payment of Annual Maintenance Contract (AMC) charges would be contingent upon the functionality of the systems as certified by the concerned local panchayats or such bodies after every 3 months" and it should be incorporated into AMC agreement itself. The Committee would like to be apprised of the final action taken in this regard.

#### E. Rural Electrification

##### Recommendation (Sl. No. 22, Para No. 2.91)

18. Expressing their concern over slow pace of rural electrification, the Committee had recommended an elected representative should be entitle to sponsor a fixed number of village for electrification, on the lines of system in vogue in State of Uttar Pradesh.

19. The Government in their Action Taken reply have informed that the recommendation has been forwarded to the Ministry of Power. However, it is up to the State Governments to introduce such a provision. The MNES has been responding to suggestions and proposals made by MLAs for electrification of villages and installation of Solar Photovoltaic Systems in their constituencies. State agencies has been advised to tap funds available under the MLALAD schemes in their States for meeting the balance cost of projects beyond the assistance provided by MNES; they has also been informed that the Ministry will give high priority to projects proposed under the MLALAD schemes.

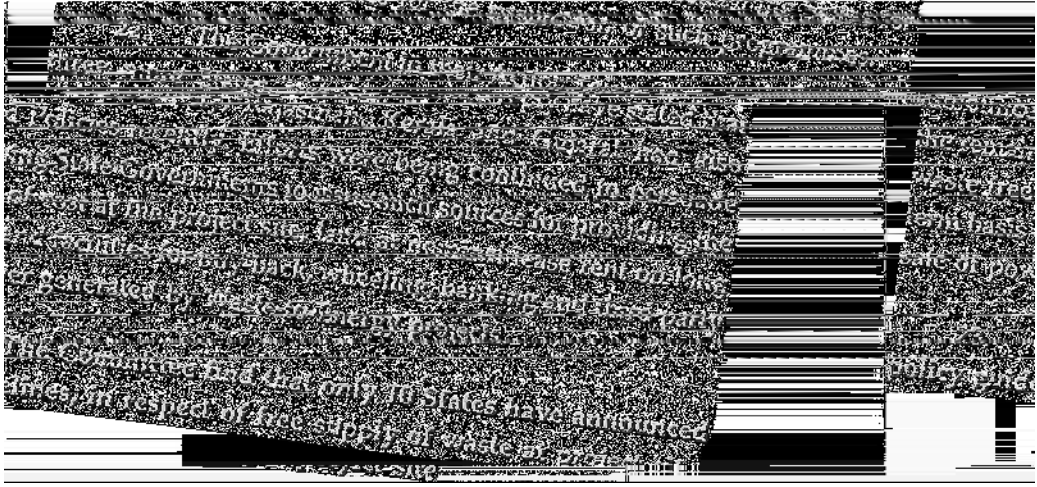
20. The Committee find that MNES is responding to the suggestions and proposals made by MLAs for electrification of villages and installation of Solar Photovoltaics (SPV) systems in their

constituencies. However, the level of satisfaction amongst public representatives over the action taken by MNES on their suggestions and proposals is not known. The Committee would like to be apprised thereof. In the opinion of the Committee, rural electrification should involve active participation, both of Government and the public representatives. It is in this context, the Committee recommend that MNES should set up a separate cell in the Ministry for guiding the public representatives in preparing bankable rural electrification schemes/projects. Such an action on the part of MNES will go a long way in intensifying and increasing the coverage of rural electrification. The Committee would like to be apprised of the outcome thereof.

**F. Problems Associated with Waste-to-Energy**

**Recommendation (Sl.No. 28, Para No. 2.112)**

21. The Committee had found that the major impediments in the implementation of the programme is the lack of clear-cut policy guidelines in most of the States in regard to allotment of land on long-term basis at nominal lease rent, supply of garbage free of cost at project site and facilities for evacuation, purchase and sale of power generated from waste-to-energy projects for encouraging the setting up of Waste-to-Energy projects. The Committee further found that only 7 States had declared their policy guidelines for encouraging such projects. The Committee urged the Government to prevail upon remaining States to declare policy guidelines for encouraging such projects.



provision of land at nominal rent and facilities for evacuation of power for wheeling, banking, purchase and third party sale of power, for the promotion of projects for recovery of energy from urban and industrial waste. Surprisingly, a majority of the States did not find any pressing need to take up such projects in a big way. Taking into consideration that only 21 MW of power is being generated as against potential of 1,700 MW, the role of this programme in meeting the power requirement can under no stretch of imagination be

undetermined. Further, the average cost of electricity generation is in the range of Rs. 1675 to 3450 per unit. The Government should take various steps for such ventures. The Committee reiterates their earlier recommendation and desire that Union Government should like to carry out efforts and motivate the rest of the State Governments to declare policy in this regard. At the same time, the Committee desire that Government should assess the technologies available world wide and undertake prioritization of projects under this programme. There is also a need to commercialise the viable technologies, suitable for Indian condition. For such an action, the Committee recommend that Government should take up the matter with premier R & D institutes and big corporate houses. The Committee should also consider the setting up of more demonstration projects to appraise this and to generate. The Committee would like to be apprised



## CHAPTER II

### RECOMMENDATIONS/OBSERVATIONS THAT HAVE BEEN ACCEPTED BY THE GOVERNMENT

#### Recommendation (Sl. No. 1, Para No. 2.13)

The Committee find that a large component of the Central Plan outlay of the MNES is derived from the Internal and Extra Budgetary Resources (IEBR). The realization of IEBR ranged from 44 to 59 per cent since 1998-99. The Committee are at a loss to understand the under-utilization of the IEBR component over the years. Further, there has always been a great variation between the budgeted Estimates, Revised Estimates and the Actuals. The Committee have noted that during the year 2001-2002, the variation is attributed to decrease in ADB loan, reassessment of disbursement target under KFW/IBRD line of credit, etc. The Committee also find that the Government could not raise projected finances through Tax Free Bonds as only Rs. 50.00 crore could be realised as against the target of Rs. 100.00 crore. In the opinion of the Committee, a wide variation between projected IEBR and actual realization is an indicator of poor budgetary management. The Committee therefore, desire that MNES should project a realistic and achievable IEBR, so that the plans and programmes of the Ministry do not go haywire. The Committee would like to be apprised of the action taken by the Government thereon. The realization of IEBR should be uniformly spread over the year so that there is no occasion for the Ministry of Finance to impose any cut at RE stage.

#### Reply of The Government

The recommendation of the Committee regarding uniform realization of IEBR spread over the year has been noted and accordingly IREDA—a PSU of this Ministry, which mainly deals with IEBR—was asked to rationalize the estimation of IEBR during the financial year 2002-03.

The following important steps were taken by IREDA for making realistic IEBR projections:—

- to obtain cash flow projections from the borrowers for estimated disbursement.
- to obtain quarterly projections regarding disbursement from IREDA including in respect of Projects being funded out of international line of credit.
- concurrent engineers/auditors for high value projects to monitor physical and financial progress of the projects and projections regarding disbursement have been appointed by the IREDA besides the periodic inspection of the projects is also taken by IREDA officials which also helps in estimating the quantum of disbursement
- an additional incentives for timely completion of the projects is provided *i.e.*, "Grid connected power projects financed under Project financing category if completed ahead of schedule as originally agreed/stipulated in the loan sanction letter without any cost overrun will be sanctioned one time Performance Reward equivalent to 0.25% of total loan disbursed".
- 0.5% reduction in interest rate for projects to be funded out of international line of credits are provided which helps in timely utilisation of international line of credits matching with the estimates of disbursements projected.
- periodic reviews are undertaken by IREDA and the Ministry and also by international lenders for the projects funded through international line of credits
- IREDA does not, as a matter of policy, finance cost over runs in the projects. This motivates the borrowers to complete their projects in time and thus adhere to the projections given by them.

Efforts will continue to be made to realise the IEER uniformly during the year, as projected in the Budget.

During 2002-03, an amount of Rs. 476.48 crores against IEER has been earmarked which is expected to be fully utilized.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

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

(Please see Paragraph 8 of Chapter of the Report)

#### **Recommendation (Sl. No.2, Para No. 2.14)**

The Committee have taken note of a substantial cut in the Budgetary allocation of MNES by Ministry of Finance during each financial year of the 9th Five Year Plan. During 1997-1998, as against an allocation of Rs. 632.87 crore, the quantum of cut was Rs. 168.99 crore. Similar cuts were noticed during the remaining years of the 9th Five Year Plan. Despite progressive utilization of the budgetary resources by the Ministry of Non-Conventional Energy Sources, the Ministry of Finance have resorted to such cuts and as a result, there has been under-utilization of allocated amounts. The Ministry of Finance, on the other hand, have averred that due to poor working of various programmes and policies of the Ministry, they had to take such drastic steps. Planning Commission have, however, opined that they had not been consulted in regard to imposition of cut by Ministry of Finance. In the opinion of the Committee, this imbroglio have resulted in under-utilization of the allocated budget and hence under achievement of targets. The Committee, therefore, recommend that different Ministries of the Government should ensure better coordination among themselves, so that such an impasse could be avoided. The Committee hope and trust that different arms of the Government would take due care and caution and act in unison, so that only achievable targets for the 10th Plan are planned for the different sectors.

### **Reply of the Government**

The Planning Commission and Ministry of Finance were apprised of the recommendations of the Committee and their comments are given below:—

#### **Planning Commission**

Planning Commission has already introduced a system of Quarterly Performance Review (QPR) Meeting under the Chairmanship of Member (Energy), Planning Commission. Besides the concerned Ministry, in this case MNES, the Ministry of Statistics and Programme Implementation, Deptt. of Expenditure (Plan Finance) and Deptt. of Economic Affairs and Senior officers of the concerned State Govts. will also be invited to participate in the meeting. A coordinated approach among different Ministries while reviewing the financial and physical progress of the programmes of MNES on quarterly basis during these review meetings would help in understanding the trend of utilization of funds provided in the budget and in making necessary recommendations at the time of finalizing revised estimates for MNES by the Ministry of Finance.

#### **M/o Finance and Company Affairs, Deptt. of Economic Affairs**

The budgetary allocations of individual Ministries/Departments are based on the proposals received from them and on the need to balance the competing demands from various Ministries/Departments. In this regard, detailed exercise is carried out by the respective Ministries/Departments before formulation of Budget proposals for a particular financial year. The revised estimates are based on the trend of actual expenditure in the first 6-7 months of the year as also on the actual expenditure incurred in the previous financial year(s) and are finalized after due deliberations with the concerned Ministries/Departments. It may also be added that over a four-year period upto 2001-2002, the plan expenditure has on an average increased by 17.9% and actual expenditure by 29%. It may also be mentioned that from the year 2001-2002, Planning Commission is fully involved in the pre-budget exercise.

Notwithstanding the above, the observations/recommendations of the Committee have been noted for compliance.

During preparation of the 10th Five Year Plan, six Sub-Groups were constituted comprising members from various stakeholder groups and Ministries/Departments such as Planning Commission, Ministry of Power, Ministry of Environment and Forests, State Governments. The experience gained during the 9th Five Year Plan was utilized in finalizing the details of implementation and targets of various renewable energy programmes for the 10th Plan.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

**Reply of the Government (Min. of Finance)**

The budgetary allocations of individual Ministries/Departments are based on the proposals received from them and on the need to balance the competing demands from various Ministries/Departments. In this regard, detailed exercise is carried out by the respective Ministries/Departments before formulation of Budget proposals for a particular financial year. The revised estimates are based on the trend of actual expenditure in the first 6-7 months of the year as also on the actual expenditure incurred in the previous financial year(s) and are finalized after due deliberations with the concerned Ministries/Departments. It may also be added that over a four-year period upto 2001-2002, the plan expenditure has on an average increased by 17.9% and actual expenditure by 29%. It may also be mentioned that from the year 2001-2002, Planning Commission is fully involved in the pre-budget exercise.

2. Notwithstanding the above, the observations/recommendations of the Committee have been noted for compliance.

[Ministry of Finance and Company Affairs, Department of  
Economic Affairs, O.M.No.2(8)-B (S)/2002  
Dated the 27th September, 2002]

**Reply of the Government (Planning Commission)**

Planning Commission has already introduced a system of Quarterly Performance Review (QPR) Meeting under the Chairmanship of Member (Energy), Planning Commission. Besides the concerned Ministry, in this case MNES the Ministry of Statistics and Programme Implementation, Deptt. of Expenditure (Plan Finance) and Deptt. of Economic Affairs and Senior Officers of the concerned State Govts. will also be invited to participate in the meeting. A coordinated approach among different Ministries while reviewing the financial and physical progress of the programmes of MNS on quarterly basis during these review meetings would help in understanding the trend of utilization of funds provided in the budget and in making necessary recommendations at the time of finalizing revised estimates for MNES by the Ministry of Finance.

[Planning Commission O.M.No.P-11072/10/2002-P&E

Dated : 28th October, 2002]

**Recommendation (Sl. No. 3, Para No. 2.15)**

The Committee have reviewed the performance of different programmes of MNES during the 9th Plan period. They have found that some of the programmes have witnessed an excellent growth, taking into consideration, the targets fixed and cumulative achievements. For instance, programmes like Biogas Plants, Community/Institutional/Night Soil Based/Biogas Programme, IREP, SPV, Solar Lanterns, Solar Water Heating Systems, Biomass/SPV power, etc., witnessed more than 80% achievement. However, programme like waste to energy could achieve only 41% of their assigned targets. The Committee recommend that while formulating 10th Five Year Plan, the Government should ensure that achievable targets are fixed. The Committee also desire that the Government should focus their attention towards the schemes/programmes, which could not achieve their assigned targets. The Committee would like to be apprised of the action taken in this regard.

### Reply of the Government

During preparation of the 10th Five Year Plan, six Sub-Groups were constituted for various renewable energy sectors such as power from renewables, solar energy, rural energy, new technologies and R&D, resource mobilization, village electrification etc. These Sub-groups comprised various stakeholders, including concerned Central Ministries/ Departments, State Governments, private entrepreneurs, research institutions, financial institutions etc. and also utilized the experience gained during the 9th Five Year Plan, while finalizing the details of implementation and targets of various renewable energy programmes.

The targets have been fixed taking into account the potential, the need and resource allocation, particular caution being exercised in respect of the programmes with shortfall in achievements during the Ninth Plan, as desired by Committee.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

#### Recommendation (Sl. No. 10, Para 2.60)

National Project on Biogas Development (NPBD) is one of the most important components of the Rural Energy Programme implemented by the Government. The programme provides direct benefits to rural families, particularly women, in terms of reducing the drudgery involved in collecting fuel materials from long distances, minimizing the health hazards and improving their standard of living. The Committee were informed that it would take another 20 years to harness about 80 per cent of the estimated potential at an average rate of 3 lakh biogas plants per year. However, the Committee are not convinced with the assumption of the Ministry. The Committee have observed that a cumulative total of the established biogas plants increased from 28.63 lakh during March, 1999 to 32 lakh by the end of March 2001. The average rate of harnessing the biogas potential therefore, stands at 1.18 lakh per annum. At this rate, it would take more than 80 years to harness the entire estimated potential which has now grown from 120 lakh to 130 lakh. The Committee find

that high initial cost of installation of biogas plants is one of the reasons for sluggish growth rate of harnessing the potential. The Committee note that the cost of common size plant is in the range of Rs.8,500 to Rs. 10,000. A fixed dome model made of ferro-cement referred to as Deenbandhu model costing about 15 per cent less, has been developed and approved for promotion also. It is becoming popular in Andhra Pradesh, Kerala, Karnataka and Tamil Nadu. Over 10,000 such plants have been installed within a span of two years only. The Committee desire that this cheaper model be popularized after making suitable design adjustments/improvements so as to suit users of different geographical regions taking into consideration, the different raw materials available locally. This will ensure the realization of 15 lakh Biogas Plant by the end of 10th and 11th Five Year Plan periods. The Committee further desire that R&D efforts especially for community based biogas plants should be stepped up so as to enhance the rate of spreading the biogas plants to the tune of 3 million plants annually. The Government should also address to the problems of inadequate maintenance and servicing at the village and block level.

#### Reply of the Government

The Ministry has taken the following steps/initiatives for popularizing "Fixed dome Deenbandhu model made of ferro-cement" in all States and Union Territories are mentioned below:

- (i) The Annual Conference- 2002 on "Implementation Strategy for Renewable Energy Programmes during the Tenth Plan" held at Vigyan Bhawan, New Delhi on 7-8th May, 2002 recommended *inter-alia* "the newly developed model of Ferro-cement Biogas plant with *in-situ* construction technique already approved for promotion under NPBD, should be increasingly promoted as it is cheaper and has a possibility of in-built quality control".
- (ii) "Construction Manual for Deenbandhu *in-situ* Model" has been widely circulated in May, 2002.



- (iii) Biogas Development and Training Centres (BDTC), located in eight States, have been directed in getting their technical staff trained in the construction of this new model from Sustainable Development Agency (SDA), Kerala, which developed the model. In turn, the trained staff of BDTCs will organise training courses for masons and entrepreneurs, for which about 50 training courses have been allocated to different BDTCs for 2002-03.
- (iv) Biogas Development and Training Centres are being requested to take steps in making suitable designs adjustments to suit local conditions, including raw materials available for popularizing the new model in their areas of operation.
- (v) SDA is being requested to bring out a leaflet, highlighting the low cost and other advantages of the new model for wider circulation.

To step up R&D efforts, especially for community based biogas plants, the thrust areas have been refined to include: (i) use of supplementary feedstocks for co-digestion; (ii) cleaning and bottling of biogas; (iii) development and modification of micro-turbines and engines to use biogas; (iv) development and adaptation of advanced biogas-reactors to efficiently and cost effectively use cattle dung and other feedstocks; (v) use of digested slurry in high value crops. Efforts are being made to solicit project proposals on these thrust areas also.

To address the problems of inadequate maintenance servicing, the National Project on Biogas Development (NPBD) is continued with focus on "cluster-area approach" and construction of biogas plants on a turn-key basis to ensure maintenance servicing during the first three years. States are being directed to identify areas/districts where the problem of non-functionality of plants exists and to train/retrain masons in repair of plants and undertake repair work by availing financial support available under NPBD.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (Sl.No.11, Para 2.61)**

One of the main reasons responsible for the sluggish growth rate in harnessing the potential is the limited Central budgetary support for the NPBD programme. The Committee found that a Plan outlay of Rs. 260.00 crore was allocated and a target of 12 lakh biogas plants fixed for the 9th Five Year Plan. However, the financial allocation was revised to Rs. 286.00 crore with a target of 10 lakh biogas plants during mid-term appraisal. Taking into consideration inadequate allocation, the Ministry requested the Planning Commission for additional amount of Rs. 65.60 crore to match the revised physical plan target. Strangely, it was not conceded to. In the opinion of the Committee, the Planning Commission should ensure that the programme like National Project on Biogas Development (NPBD) is not deprived of the matching funds as it has a direct bearing on improving the quality of life of the rural population, particularly the women. At the same time, the Committee recommend that the Ministry should chalk out their own plan of action so as to utilize the budgeted amount and realize their physical targets fully.

**Reply of the Government**

The Planning Commission has allocated a Plan Outlay of Rs.350.00 crore for the Tenth Plan against a proposal of Rs.660.00 crore for a target of 15.00 lakh family type and large sized plants. However, the allocated Plan Outlay is higher than the actual expenditure of Rs.277.88 crore incurred during the Ninth Plan. The Tenth Plan target is now 10 lakh plants against actual achievement of 8.32 lakh plants during the Ninth Plan.

With a view to explore the scope of taking up biogas programme without exclusively depending upon Central subsidy, it is proposed to set up *ad-hoc* Consultative Group, represented by the selected State Governments, NGOs and commercial banks, besides NABARD, Planning Commission and Ministry of Rural Development.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (S.No.12, Para 2.62)**

The Committee are perturbed to note that the NPBD programme has failed miserably in the North-Eastern States in spite of extending 10% of MNES total Domestic Budgetary Support (DBS) to the North-Eastern States including Sikkim for various renewable energy sources programmes including NPBD. Unfortunately, no investment was made in the States of Arunachal Pradesh, Assam, Manipur and Nagaland and in all the other States less than 50 per-cent of the allocated funds were utilized during the year 2001-2002. The Committee also find that none of the North-Eastern Region States accepted the targets fixed for NPBD for want of matching State budget to meet the provision of State subsidy. The Committee, therefore, recommend that the Government should vigorously pursue all the North-Eastern States to give top priority to all the renewable energy sources programmes, specifically the programmes like NPBD.

**Reply of the Government**

The Ministry has been taking all necessary steps to review the implementation of renewable energy programmes in the North Eastern States through review with the State Governments, regular visits of the officers of MNES and its regional office at Guwahati. During 7-8 May 2002 the Ministry organised an Annual Conference to interact with all concerned quarters in which 25 participants from all North-Eastern States participated. The review was undertaken at the level of Minister of State for Non-Conventional Energy Sources and all representatives were requested to accord top priority for implementation of the renewable energy programmes. Higher rates of Central subsidies have been provided under solar photovoltaic, small hydro power, biomass gasification and biogas programmes in the North-Eastern States.

Regarding National Programme on Biogas Development, the higher rates of Central subsidy and turnkey job fee, which were enhanced in 2001-02 for North-Eastern States, are being continued during 2002-03. A total target of over 7,000 plants has been planned for North-Eastern Region States for 2002-03, against an achievement of 5,350 plants in

2001-02. It is proposed to pursue the matter at the level of Chief Ministers and Chief Secretaries.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

### **Comments of the Committee**

(Please see Paragraph 14 of Chapter 1 of the Report)

#### **Recommendation (S.No. 13, Para 2.63)**

The Committee find that the total estimated potential of the family type biogas plants in the country is 130 million and the average rate of harnessing the Biogas potential stands at only 1.18 lakh per annum. At this rate many more years will be required to harness the Biogas potential in the country. The Committee also find that the lack of ability of majority of small and marginal farmers to invest in biogas plant costing about Rs. 8,000 to 12,000 is one of the reasons causing slow rate of spread of the biogas plants in our country. The Committee further find that the recently developed cheaper methodology of on-site construction of Deenbandhu Model with ferro-cement is becoming popular in Andhra Pradesh, Kerala, Karnataka and Tamil Nadu. Over 10,000 such plants have been installed within a span of two years only. The Committee, therefore, recommend that all out efforts should be made to strengthen R&D efforts in this area and to develop the cheaper model having better construction methodology and wide applicability like *in situ* ferro-cement Deenbandhu Model should be promoted throughout the country so that the rate of spread of the biogas plants may be raised up to reach 3 million plants annually.

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

R&D work on "Development of high efficiency biogas plants through modifications in design and feedstock amendment" and "Design and development of high performance biogas digestors for the North-Eastern Region of India" have been initiated recently at National Environmental Engineering Research Institute, Nagpur and Indian

Institute of Technology, Guwahati, respectively. Four other projects are being processed. Efforts are being made to solicit more R&D projects from State and district level institutions and NGOs, which already have basic information and facilities.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (S.No. 14, Para 2.86)**

The features of renewable energy technologies characterized by small-scale capacities for decentralized applications, modular nature of the technologies and their suitability to meet specific energy needs are ideal for meeting diverse rural energy needs rather than meeting energy needs of mega cities and large industrial towns. Thus, it becomes all the more important to explore the possibilities and feasibilities to meet all the energy needs of all the 18,000 un-electrified villages in an integrated manner. For this, it is imperative to assess the energy needs and resources available in each and every village and then develop renewable energy packages to meet the energy needs for different villages in a sustainable and financially viable manner. The Committee, therefore, recommend that a methodology be developed for arriving at an optimum mix of various renewable energy technologies based on technical, financial and social parameters. An integrated approach, apart from developing and implementing the technology package, would necessitate the development of institutional mechanisms for planning, implementing and managing the integrated energy plans necessary for smooth maintenance and operation of various non-conventional systems used for electrifying all the 18,000 villages through Village Electrification Programme. The Committee desire that Government should take necessary action in this regard.

**Reply of the Government**

The Ministry agrees with the observations made by the Committee. The Ministry proposes to support surveys and investigations aimed at assessing the energy needs and resources available in the 18,000 remote

villages. This would enable identification of appropriate technologies and development of mechanisms for planning, implementation and management of the Village Electrification Programme.

In order to ensure optimal mix of renewable energy technologies the options for using biomass gasification, small hydro power and solar photovoltaic technologies in the village electrification programme would be explored depending upon the resource availability, energy needs for different villages in a sustainable and financially viable manner.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (S.No. 15 Para 2.87)**

The Committee are happy to learn that all the 18,000 unelectrified villages which cannot be electrified through conventional grid power will be electrified through MNES under the village Electrification Programme by the year 2012 A.D. 5000 of these villages are proposed to be electrified during the 10th Five Year Plan using mainly Solar Photovoltaics, Biomass and Small Hydro Power Techniques. The Committee find that the Ministry of Power, who were assigned the responsibilities of identifying such villages are yet to furnish the list. The Committee appreciate that the Ministry of Non-Conventional Energy Sources themselves have surveyed 3 States *viz.* Rajasthan, Chattisgarh and Orissas. The Government of Kerala and Assam have also furnished the lists of villages to be electrified through non-conventional means. But the Committee are perturbed to note that only a paltry sum of Rs. 4.35 crore was spent out of Rs. 20.00 crore during the year 2001 & 2002. Now, Rs. 61.50 crore have further been earmarked to electrify 500 villages for the year 2002 & 2003. The Committee are sceptical about achieving the target by the Government. The Committee cannot but deplore the way the Government have initiated a programme like Village Electrification Programme without having a comprehensive list of identified villages. The Committee, therefore, recommend that the Ministry of Non-Conventional Energy Sources should, without waiting for identification of villages, also assess suitability of various sources of renewable energy in each case and the availability of raw materials to be used as inputs for various

renewable energy sources/ systems and thereafter prepare a technology package for them. The Committee also desire that the Government should leave no stone unturned and meticulously act to achieve the target of electrifying 18,000 villages by 2012 A.D.

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

As reported to the Hon'ble Committee, the amount of Rs. 4.35 crore was the figure upto 31.12.01 and based on reports received from the States implementing them. The total expenditure on village electrification during 2001-02 was Rs. 18.23 crores against the allocation of Rs. 20 crore. The Ministry has already received proposals from several States for the year 2002-2003 and is confident of utilizing the allocations made for the programme. As recommended by the Committee, the Ministry will take all actions to achieve the goal of electrifying 18,000 villages by the year 2012.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

#### **Recommendation (S.No. 16, Para 2.88)**

The Committee concur with the three models suggested for implementation arrangements for village electrification. The Committee are of the view that such arrangements will ensure maintenance, servicing and collection of monthly charges or other dues from the beneficiaries. The Committee would like that the Government should share their experience of the working of such a model.

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

For operation, maintenance and collection of monthly charges, the model of constituting a Samiti with involvement of local people is being tried in the small hydro projects. The experience so far has been quite encouraging which is also proposed to be applied at a larger scale for village electrification programme.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (S.No. 17, Para 2.88a)**

It has been brought to the notice of the Committee, lack of maintenance and after sale services especially of batteries, have affected Solar Photovoltaics Programme, to a large extent. The Committee, therefore, desire that a close liaison should be established with the local Panchayat and bodies, who should certify the functionality of the system after every 3 months. The flow of funds for the programme should be contingent upon furnishing of functionality certificate by the Panchayats. Such a clause should be ingrained in the warranty agreement itself.

**Reply of the Government**

The Ministry has always laid great emphasis on maintenance and after-sale service. The scheme guidelines of the Ministry provide for an annual maintenance contract (AMC) for the Solar Photovoltaic Programme for a period of five years including the warranty period. The orders are to be placed only on companies which agree to offer such an AMC. Following the Committee's recommendation, a specific clause stating that "the payment of AMC charges should be contingent upon the functionality of the systems" has been incorporated in the scheme guidelines for 2002-2003

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

**Comments of the Committee**

(Please see Paragraph 17 of Chapter I of the Report)

**Recommendation (S.No. 18, Para 2.88b)**

The Committee have also observed the untapped solar power potential in the State of Uttaranchal, tribal districts of Bihar, especially Kaimoor/Champaran district and Rajasthan. The Committee desire that Ministry of Non-conventional Energy Sources should explore the possibility of steeping up of harnessing Solar Power in these areas. The Committee would like to be apprised of the action taken in this regard.



The Committee also desire that preference should be given to tribal hamlets, for electrification through Solar Power Programme.

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

Considerable emphasis is already being given to electrification of remote villages/hamlets, particularly in identified high-focussed areas, such as those indicated by the Committee. However, the Committee's recommendation has been brought to the notice of the concerned State agencies in Uttaranchal, Bihar and Rajasthan so as to focus on such priority areas while formulating the village electrification projects. The Ministry is actively following up the matter.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

#### **Recommendation (S.No. 19 Para 2.88c)**

It has been brought to the notice of the Committee that there are fake manufacturer/suppliers of various equipments, such as Solar Modules/Cell, etc. used in the Solar Power Programme. The Committee recommend that before placing order for procurement of any equipment, Ministry of Non-Conventional Energy Sources/ State Nodal Agencies/or any procurement agencies should ascertain the genuineness of the firm/company. The Committee also recommend that any registered genuine company/firm should be permitted to supply such equipments. The Committee also desire that Government should monitor the position closely, so as to ward off any bogus/fake companies. The Committee also recommend that training for O&M should form a component of supplies, for effective implementation of the programme.

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

The Ministry's guidelines relating to the Solar Photovoltaic Programme include detailed specifications of commonly used photovoltaic systems and require manufacturers intending to supply systems under the programme to send their products for testing at authorized test centres. All manufacturers who possess valid test reports are eligible to supply the systems. As recommended by the Committee, all programme

implementing organizations have been advised to ascertain the genuineness of the firms/companies; this has been incorporated in the scheme guidelines for 2002-03. Training is also being provided by manufacturers in several cases, an example is a recently completed project for the electrification of villages in Ladakh.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (S.No. 25, Para 2.110)**

The Committee have found that several waste-to-energy technologies have been developed and demonstrated, which not only help in reducing the quantity of wastes and generating heat or electricity, but also improve its quality for meeting the pollution control norms. This is the programme which concerns with improving the quality of life in the cities. There exist 1,700 MW potential of power from urban and industrial waste. However, only 17 MW has been harnessed so far. The Committee are distressed to note that the Ministry have never been successful in utilizing the allocated funds since the very inception of the programme. During 8th Five Year Plan, Ministry could utilize Rs. 17.91 crore out of the allocated fund of Rs. 20.00 crore. During 9th Five Year Plan, the situation has further worsened and the Ministry could utilize Rs. 33.54 crore only, against the allocation of Rs. 61.00 crore. As a result, the Ministry could not achieve their physical targets during these years. In the opinion of the Committee all these are happening due to slackness on the part of the Ministry. The Committee desire that the Ministry of Non-Conventional Energy Sources should come out with a long-term Perspective Plan so that the funds allocated could be utilized fully. The Committee also desire that the States should be motivated to undertake projects on recovery of Energy from wastes in a big way.

**Reply of the Government**

The Waste-to-Energy Programme was in its initial phase of implementation during the 9th Five Year Plan. Considerable efforts and

time were taken in creating awareness, motivating entrepreneurs, financial institutions, project promoters and Government Departments/ Agencies and getting clearances from various statutory bodies. The implementation of various projects got, therefore, delayed which resulted in non-achievement of targets. Based on the experience in the 9th Plan, efforts are now made to ensure that full project approval and financial closure is achieved before commencement of execution.

A few initiatives taken for the 10th Five Year Plan period are as follows:

- (i) Provision of financial support of upto 50% of the project cost limited to Rs. 3.00 crore per MW for upto two projects per State as demonstration projects.
- (ii) To prepare a National Master Plan for overall development of waste-to-energy sector in the country.
- (iii) To encourage private entrepreneurs for setting up waste-to-energy projects on the basis of BOO, BOOT, BOLT, etc.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (S.No 26, Para 2.110a)**

It has been brought to the notice of the Committee that in waste-to-energy programme hardly any emphasis is given to realize energy from Urban and Industrial waste. The Committee are of the view that since Agriculture and Urban and Industrial waste, form component of the programme, Urban and Industrial waste also deserve better attention. The Committee, therefore, recommend that Government should focus their attention towards realization of power from Urban and Industrial waste. The Committee would like to be apprised of the action taken by the Government in this regard.

### **Reply of the Government**

The Ministry is continuing the implementation of a National Programme on Recovery of Energy from Urban and Industrial Wastes. The Scheme provides for various fiscal and financial incentives. A total of 19 Waste-to-Energy projects of total capacity about 22.5 MW (equivalent) have already been set up in the country with financial support from this Ministry, and eight projects of total capacity about 10 MW (equivalent) are under implementation.

Efforts are being made to develop more projects for energy recovery from different wastes from urban and industrial sectors. The Programme is being continued during the 10th Five Year Plan period with an outlay of Rs. 125.00 crore and a physical target of 80 MW.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

### **Recommendation (S.No. 27, Para 2.111)**

In the opinion of the Committee lack of demonstration projects is one of the missing links in the promotion of this programme. The Committee desire that 'Demonstration Projects' may be taken up with a view to instilling confidence, gaining experience and creating awareness amongst project promoters, financial institutions, Government Organizations/ Departments, etc. There is a need to attend to high capital cost of waste to energy projects and also to the problem of lack of financial resources with urban local bodies. The Committee would like to be apprised of the action taken by the Government on these matters.

### **Reply of the Government**

The Ministry is providing financial support of upto 50% of project cost limited to Rs. 3.00 crore per MW for encouraging setting up of demonstration projects based on various wastes from urban sector and selected industries with a view to generate confidence, gain experience and create awareness among project promoters, financial institutions Government organizations, etc.

A few initiatives taken during the year 2002-2003 are as follows:—

- (i) Capital subsidy of upto 50% of the project cost limited to Rs. 3.00 crores per MW will now be available for upto two projects based on municipal solid wastes per State and two projects for each selected industrial waste.
- (ii) Rate of interest subsidy for the loan for projects for energy recovery from Municipal Solid Wastes has been raised for reducing the rate of interest to 4% against the earlier level of 7.5% in respect of the projects taken up by Urban Local Bodies/Municipal Corporation.

Fifteen demonstration projects for waste-to-energy based on biomethanation technologies have been taken up for utilisation of various wastes such as Municipal Solid Wastes, Vegetable Wastes, Slaughterhouse and Tannery Wastes, Food Processing Wastes, Animal/Poultry Wastes, Pulp & Paper industry wastes, etc. Of these seven projects have already been completed. The demonstration project of 5 MW capacity based on biomethanation of municipal solid waste has also been sanctioned for the city of Lucknow. The plant is under construction and is slated for completion in March, 2003.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (S.No. 28, Para 2.112)**

The Committee find that the major impediments in the implementation of the programme is the lack of clear-cut policy guidelines in most of the States in regard to allotment of land on long-term basis at nominal lease rent, supply of garbage free of cost at project site and facilities for evacuation, purchase and sale of power generated from waste-to-energy projects for encouraging the setting up of waste-to-energy projects. The Committee further find that only 7 States have declared their policy guidelines for encouraging such projects. The Committee would like to

emphasize that remaining State Governments should be persuaded to declare their respective policy guidelines to promote the programmes. The Committee further find that even amongst the 7 States, there are no uniformity in the policy guidelines issued by them. While 3 States, namely Uttar Pradesh, Maharashtra and the Punjab have announced policies for supply of wastes at the project site free of cost and the State of Tamil Nadu has declared a policy for providing wastes free of cost at the dump sites. In the opinion of the Committee a uniform policy should be adopted for providing wastes free of cost at the project site. Accordingly, the Committee recommend that garbage should be supplied free of cost at the project site.

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

As a result of Ministry's efforts in taking up the matter of issuing Policy Guidelines with various State Governments, three more States, namely, Rajasthan, Kerala and Gujarat have also announced Policies recently. Efforts are being continued to persuade the remaining State Governments to issue such sources for providing the waste free of cost at the project site, land at nominal lease rent on long term basis and facilities for buy-back, wheeling, banking and third party sale of power generated by waste-to-energy projects.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

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

(Please see paragraph 23 of Chapter I of the Report)

#### **Recommendation (S.No. 29, Para 2.113)**

The Committee find that financial incentives offered under the programme, are not attractive enough to enthuse the confidence of a promoter. The Committee desire that the interest subsidy should be increased in the interest of the programme. Simultaneously, State/Central Government should announce a Tax Holiday and reduction in Central/State Taxes, etc. on the lines of Biomass Power Generation for the benefit of the promoters.

**Reply of the Government**

Interest subsidy for the projects for recovery of energy from Municipal Solid Wastes has been increased for reducing the rate of interest to 4% against the existing level of 7.5% in respect of the projects taken up by Urban Local Bodies/ Municipal Corporations. Fiscal benefits such as Tax Holiday and reduced Central/ State taxes applicable for biomass power generation are also generally applicable for waste-to-energy projects. Efforts are being made to reduce any disparities in this regard.

[Ministry of Non-Conventional Energy Sources  
O.M.No. 8/4/2002-P&C Dated : 8.11.2002]

### CHAPTER III

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

##### **Recommendation (S.No.6, Para 2.44)**

The Committee note that 1356 gasifier systems with an aggregate capacity of 42.82 MW (equivalent) have been installed in the various States. During the years 2001-2002, as many as 21 projects aggregating to 2.60 MW capacity have been sanctioned. The Committee find that despite a package of favourable fiscal incentives like 100 per cent accelerated depreciation for some power generation equipment, Five Year Tax Holiday with 30 per cent exemption in the next five years, Customs Duty, Central Excise Duty, Central Sales Tax and General Sales Tax exemption, the programme has not picked up. Unfortunately, only four States have declared their policies so far in regard to private sector participation in the Biomass Conversion and Utilization Programme. The Committee find that the policies announced by the State Governments are at variance with the MNES guidelines especially as it does not allow third party sale. The Committee desire that the Ministry give a fresh look at the programme and its implementation. The Committee have noted that some key-barriers which need immediate redressal, include inadequate field demonstration and performance guarantee, lack of institutions to undertake planning, implementation and operation and management and uncertainty about the biomass supply. The Committee desire that the Ministry should take effective and concrete remedial measures to overcome all the above barriers and the Committee be informed of the action taken in this regard. The Committee note that no

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Gasifiers that operates on crop/agro-industrial residuals to improve performance and reduce costs. The Committee desire that a time bound action plan be drawn up to start R&D projects in the above fields.

### **Reply of the Government**

10th Plan proposals for implementation of the Biomass Energy & Cogeneration Programme have been formulated after review of the Programme in the 9th Plan, and based on the recommendations of the Working Group. It is proposed to take an integrated approach covering biomass production, different conversion technologies and utilization, both for decentralized stand-alone applications and grid connected power generation, with the involvement of various stakeholders. The programme will provide thrust to Biomass Resource Assessment; Research & Development and technology development and upgradation; demonstration and field trials; commercialisation and private investments; operation & maintenance; performance; information dissemination; and, creation of awareness. Biomass resources to be utilized would include surplus crop residues; forestry residues; agro-industrial residues; and, woody biomass from energy plantations. The main technologies that are proposed to be promoted include biomass combustion, cogeneration and gasification. The applications that will be addressed pertain to thermal applications and captive power generation in industry; augmentation of grid power; and, village electrification.

The Central Financial Assistance will be provided through grants or interest subsidy for different categories of projects and end-users, and other incentives for promotional and capacity building activities.

The basic objective of policy interventions will be to ensure a level playing field and creation of conducive environment for biomass power generation technologies through removal of barriers and discriminatory policies in States. Interaction with the State Electricity Boards/State Governments is proposed to be continued to ensure that their power purchase policies for biomass based power/cogeneration projects become attractive and remunerative for private sector investments.

The implementation of the Biomass Energy and Cogeneration Programme will be taken up with active involvement of various stakeholders including State Nodal Agencies, State Governments, State Electricity Boards, Industries Associations, Financial Institutions, private sector industry, investors, developers, and the public/ cooperative sectors.

Several R&D including Applied R&D projects, for development of new products and processes, and technology development and upgradation, are being supported under the Biomass Energy Programmes. These include a project on Strategic Development of Bio-energy for development of different technology packages and industrial applications; a multi-institutional Advanced Biomass Gasification project for development of high pressure gasifiers to be coupled to gas turbines; projects on development of 100% producer gas engines; model projects on village electrification and industrial applications of biomass gasification; and, a joint project for preparation of a Biomass Resource Atlas for India. All the R&D projects are time-bound, with a specified outlay and duration.

Prototypes of 100% producer gas engines of upto 200 KW capacity have been successfully developed under the R&D projects, and are proposed to be installed for demonstration and field trials during the next two years, after which their commercialisation is expected in the remaining period of the 10th Plan. 100% producer gas engines would operate on various biomass materials, including crop/agro industrial residues, and would help to offset the use of diesel fuel in biomass gasifiers operating in dual fuel mode.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (S.No. 7, Para 2.44a)**

The Committee have noted that Biomass potential in the States, especially Kerala has not been harnessed fully. The Committee desire that Government should draw an Action Plan to exploit the Biomass potential in Kerala and other States. The Committee do not concur with the views

of Government that since the technology for the Biomass Utilisation has been standardized and the programme attained commercialization, there is no necessity of any subsidy. The Committee desire that Government should extend capital and interest subsidy for Biomass projects as it has not picked up so far to the desired extent.

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

The Ministry is implementing a National Biomass Resource Assessment Programme in 23 States, including the State of Kerala, with the objective of assessing surplus biomass availability at taluka level, for power generation and other application. Out of 475 studies taken up so far, 13 studies have been undertaken in the potential talukas in Kerala. It is proposed to further intensify biomass resource assessment efforts in selected potential States, including Kerala, through district-level biomass resource assessment studies during the 10th Plan. An outcome of these efforts will be the preparation of Biomass Resource Atlas for India.

During the 10th Plan, it is proposed to provide interest subsidy to commercial biomass power/co-generation projects and for bagasse co-generation projects implemented by cooperative/public/joint sector sugar mills. Central Financial Assistance is also proposed to be provided for industrial applications of biomass gasifiers, captive power generation and a limited number of demonstration-and-field trial projects on 100% producer gas engines, as well as grid power projects based on advanced biomass gasification technologies. Grant assistance will also be provided for electrification of remote and inaccessible villages through biomass gasifiers.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

#### **Recommendation (S.No. 8, Para 2.45)**

Biomass has been one of the important sources of fulfilling rural energy requirement since time immemorial. Amongst the various

decentralized electricity generation operations, sustainable biomass based electrification is the most suitable option and less costly than any other renewables. The Committee are happy to learn that 2000 villages out of 18,000 unelectrified villages are proposed to be electrified through biomass gasifier systems by the end of 11th Five Year Plan period. A total potential of 5 MW for biomass based power have been assessed by the State Nodal Agency (SNA) for Sunderbans in West Bengal. A 250 KW biomass gasifier project is also being implemented in Lakshadweep. Though two study teams have visited the Andaman & Nicobar Islands, the Committee are unhappy to learn that no action plan has been drawn up. The Committee desire that the Ministry should come out with comprehensive plan for all the 2000 villages to be electrified through biomass gasifiers system.

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

A goal for electrification of 2000 villages through biomass gasifiers is envisaged for the year 2012. A detailed plan of action for biomass gasifiers will form part of the overall Programme for electrification of 18,000 remote villages through non-conventional energy sources.

During the 10th Five Year Plan, 500 villages are proposed to be electrified through biomass gasifiers of aggregate capacity 25 MW, including 230 villages in North Eastern States & Sikkim, and 270 villages in other States. During 2002-03 a target of 30 villages, including 10 villages in North-Eastern States & Sikkim, aggregating to 1.5 MW, with an average load of 50 KW, has been fixed. 25 kWe unit size capacity, and modular upto 100 kWe is proposed; a special rating of 10 kWe will also be allowed. For cluster of villages, 100 kWe size and modular upto 1 MW, has been proposed. Implementation will be carried out by/ through State Nodal Agencies with the involvement of ESCOs, Co-operatives, Panchayats, NGOs, manufacturers or entrepreneurs. Central Financial Assistance will cover biomass gasifier systems, housing and local distribution; collection, processing and storage of biomass; and, operation and maintenance. In addition, micro-credit facility for internal wiring has also been proposed. Higher CFA will be provided for North-Eastern States & Sikkim.

Further projects in Sunderbans, Lakshadweep, and Andaman & Nicoba Islands will be planned after detailed assessment of the biomass resource potential, and technical performance and success of the projects implemented so far in these areas. Discussions are in progress with the authorities in the concerned States and Union Territories for development of projects as per their requirements.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (S.No. 9, Para 2.46)**

The Committee have found that the Government have not shown the required enthusiasm in motivating the entrepreneurs to install and maintain the biomass gasifier system. The Committee are not convinced with the arguments put-forth by the Ministry that the entrepreneurs are likely to find the village electrification projects unattractive and unremunerative in the near future. The examples of Gosaba Islands and Chotamollakhali Islands in West Bengal which are run by Committee or cooperative society comprising the local people are an eye opener. They are working smoothly and are running in profit. The monthly expenditure and monthly revenue earning of Gosaba Island system (500 KW), situated in Sunderbans Islands (West Bengal) providing electricity to 10,000 people, are Rs. 52,000 and Rs. 60,000 respectively, thereby running at a net profit of Rs. 8,000 per month. The experience of Hosuhalli and Hanumantyanagara in Karnataka and Gosaba in West Bengal shows the feasibility of village electrification programmes based on KW scale biomass gasifiers-based decentralized power generation systems in India.

**Reply of the Government**

Based on the successful implementation of biomass gasifier projects for village electrification in certain States, such as Sunderbans in West Bengal, and in Karnataka, during 10th Five Year Plan, it is proposed to expand this Programme as explained in the reply to Para 2.45. Different models for implementation of the village electrification programme are planned to be evolved, involving implementation through State Nodal

Agencies; or, through village-level cooperative societies, panchayats, other local bodies; or, through Non-Government Organization, Self-Help Groups; or, through private developers, entrepreneurs, other corporate entities. Capacity building and training would be provided to secure the involvement of local entrepreneurs and unemployed youth in the installation, operation and maintenance of these projects. Efforts would also be made to develop adequate loads and provide electricity for productive uses to make the operation of the projects remunerative and sustainable in the long run.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

## CHAPTER IV

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

#### **Recommendation (S.No. 5, Para 2.17)**

The Committee note that the Ministry have made a resolve to achieve the target of additional installed capacity of 10 per cent i.e., 10,000 MW by the year 2012. In addition, it has also been decided to electrify all the 18,000 un-electrified village through various Non-conventional Energy sources which cannot be electrified through conventional grid power. The Committee are happy to note that the Government has acceded to the long standing request of MNES for removal of Counter-Vailing Duty on import of raw materials required for manufacture of blades of Wind Electric Generators (WEGs) and exemption of basic duty on import of certain capital equipment required for manufacture of Solar Photovoltaic Cells/Modules. The Committee view that these concessions would undoubtedly go a long way in giving the much needed impetus to the development of the non-conventional sector. The Committee feel that there are other sectors in MNES which also require such a favourable dispensation. The Committee, therefore, urge that for sustaining the growth of non-conventional energy sector, reduction in customs duty on import of components used in PV system be brought down to 15%, Import Duties on the Biogas engine-sets of capacity 1 MW and above used in waste-to-energy conversion project be removed. 5% duty on Import on (i) tempered glass used in solar thermal collectors and (ii) thin aluminium sheet used in solar cookers should be levied. Moreover, this existing 100% accelerated depreciation benefit should be allowed to continue. The Committee hope and trust that taking into consideration the long-term perspective in view, the Government would accede to their desire.

### **Reply of the Government**

The Ministry will take up the matter about removal or reduction in customs duties as suggested by the Committee again with the Ministry of Finance during the exercise for budget proposals for 2003-2004.

As regards 100% accelerated depreciation, it has been reduced to 80% on renewable energy devices and systems, despite the Ministry's strong recommendation to continue the 100% depreciation.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

### **Comments of the Committee**

(Please see Paragraph 11 of Chapter of the Report)

### **Recommendation (S.No. 22, Para 2.91)**

The Committee have been informed that in some of the States, notably UP, MLAs are entitled to sponsor a fixed number of villages of their choice for Rural Electrification. The Committee are of the view that an elected representative should have the prerogative to sponsor social or economic development works, including Village Electrification. The Committee recommend that the system in vogue in UP should also be introduced at the Centre. The Committee would like to be apprised of the action taken in this regard.

### **Reply of the Government**

The recommendation has been forwarded to the Ministry of Power. However, it is up to the State Governments to introduce such a provision. The MNES has been responding to suggestions and proposals made by MLAs for electrification of villages and installation of solar photovoltaic systems in their constituencies. State agencies have been advised to tap funds available under the MLALAD schemes in their States for meeting the balance cost of projects beyond the assistance provided by MNES;



they have also been informed that the Ministry will give high priority to projects proposed under the MLALAD schemes.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

**Comments of the Committee**

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

## CHAPTER V

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

#### Recommendation (S.No. 4, Para 2.16)

The Committee are happy to learn that the Ministry have succeeded in establishing a total capacity of 358 MW through biomass/bagasse based power generation, 1507 MW capacity through wind power and 217 MW through small hydro projects. Bulk of these capacities has come through private investments. A capacity of nearly 3400 MW grid quality power has already been installed. This constitutes 3.4% of the total installed power generation capacity in the country. However, the penetration of renewables is far less when compared to the existing potential, despite several innovative policies and measures taken to promote them. In the opinion of the Committee there are some bottlenecks, which have come in the way of promotion and development of renewable energy sources. These include higher initial operational and maintenance costs, lower reliability, lack of level playing field, failure to recognize the key-barriers with respect to each of the renewable energy technologies and lack of need-based Research and Development (R&D) work for the removal of the key-barriers. The Committee recommend that the Ministry should take corrective measures which, *inter-alia*, should include re-orientation of R&D efforts, dissemination strategy and policies to encourage commercialization and private sector and community participation, development appropriate strategies to attract private sector and international funding and creation of awareness on various aspects of renewables. The Committee would like to be apprised of the action taken by the Government in this regard.

### **Reply of the Government**

In order to take a long term view, and to realize the full potential of renewables, the Ministry has prepared a draft Renewable Energy Policy Statement with a view to put in place an appropriate policy, institutional, financial and technical framework for accelerated development of renewables in the country. For effective implementation of the objectives and strategy, and achievement of the goals, the Policy Statement encompasses the following dimensions towards creation of a suitably supportive enabling environment — technology development and deployment; quality assurance; fiscal and promotional incentives; credit infrastructure; legislative and regulatory support; human resource development and institutional development. The aspects relating to R&D, commercialization, community participation, international funding, creation of awareness, etc. have also been covered in the Policy Statement. The draft Policy Statement was discussed by the Union Cabinet in July, 2000. The Cabinet referred the Policy Statement to a Group of Ministers (GoM) headed by Minister of Human Resource Development, Science & Technology and Ocean Development. The decision of the GoM is awaited.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

### **Recommendation (S.No. 20, Para 2.89)**

The Committee appreciate the definition of an electrified village where under, a village is deemed to have been electrified, if 60% of households have accessibility to power. The Committee, desire that such a definition should be accepted by other agencies involved in rural electrification, such as Ministry of Power.

### **Reply of the Government**

The recommendation has been forwarded to the Planning Commission and the Ministry of Power.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

### **Reply of the Government**

Taking into account the views of the Standing Committee on Energy regarding change in existing definition of village electrification, the matter has been taken up with the State Governments/SEBs for eliciting their views so that a consensus could be arrived at for evolving a new definition of village electrification.

**[Ministry of Power O.M. No. 44/16/2002-D(RE)  
dated : 16th August, 2002]**

#### **Recommendation (S.No. 21, Para 2.90)**

The Committee find that taking into consideration the backward nature of the remote areas and prevalent poverty conditions in major States of U.P., Bihar, Orissa, etc., the village electrification programme ought to be supported through some special financial dispensation. Accordingly, the MNES had proposed that 90% of the cost should come from the Central Government in the forms of grant and the balance 10% be borne by the State Government or by the beneficiaries by way of loan to the users. This proposal was included in the overall action plan for 100% village electrification being prepared by the Ministry of Power for Government approval. Surprisingly, the Ministry of Power did not as yet seek approval of the Government. The Committee take a serious view over this and desire that the Ministry of Power should take the approval of the government without further loss of time. The Committee also find that 3943 out of 18,000 unelectrified villages belong to the 6 North-Eastern States viz. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram and Tripura. The Ministry have further informed the Committee that higher physical targets were set for the cheaper programme like NPBD but none of the States could provide 10% of matching fund against 90% of Central funding. The Committee wonder as to how these villages belong to the 6 North-Eastern States could be electrified on the basis of above mentioned proposal of 90% grant from Central Government and 10% grant from State Government when none of the North Eastern States accepted that targets even for the programme like NDB which is relatively

cheap, for want of matching State Plan budget to meet the provision of State subsidy. The Committee desire that MNES should source 10% contribution from Fls on soft term lending. The Committee also desire that MNES should formulate bankable proposals for village electrification for 10% funding from MPLAD or similar schemes. Even the North Eastern Council could be approached to contribute 10% component to cover the village in the North-East.

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

The recommendation has been forwarded to the Ministry of Power and the Department for the Development of North Eastern Region. The Ministry proposes to seek approval of Government for a higher level of grant support for the programme for the electrification of remote villages. A few States in the North Eastern Region have started implementing the programme on the basis of 90% grant from the Central Government. Comments of the Department for the Development of the North Eastern Region have been sought on mobilization of the balance 10% from the North Eastern Council.

For electrification of villages through small hydro power and biomass gasifier projects, the proposals have been received from the State of Arunachal Pradesh wherein the State agency has indicated meeting of the balance 10% of funds from MPLAD or similar schemes.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

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

Taking note of the financial difficulties of the State Electricity Boards and their inability to service debt for extending the network in rural areas, the Government have introduced a new interest subsidy scheme called Accelerated Rural Electrification Programme (AREP) under which State Governments would get interest subsidy on loan assistance and pass it on as a grant to the State Electricity Boards/Power Utilities. The proposal has been placed before the Group of Ministers (GOM) for consideration.

As regards the recommendations of the Committee that MNES should source 10% contribution from FIs on soft loan. Ministry of Power has no comments to offer, as the recommendation exclusively pertains to MNES.

[Ministry of Power O.M No. 44/16/2002-D(RE)  
dated 16.8.2002]

**Recommendation (S.No. 23, Para 2.92)**

The Committee find that for accelerating the pace of Village Electrification Programme, WBREDA have submitted that 3 MW tidal and wind power projects for the consideration of the Central Government. The Committee desire that these projects should be examined and cleared expeditiously after ascertaining their techno-economic viability. The Committee also recommend that taking into consideration the backwardness and remoteness of Sunderbans area, all Ministry of Non-Conventional Energy Sources projects in the area should be entitled for 90% grant and 10% loan. The Committee appreciate the role performed by WBREDA in ensuring electricity through the means of non-conventional energy sources in the far-flung and remote areas like Sunderbans. The committee desire that Sunderbans type of experiment be replicated throughout the length and breadth of the country.

**Reply of the Government**

Proposals for 2 MW Demonstration Wind Power Project at Fraserganj and 500 KW Wind Diesel Hybrid System at Sagar Islands in Sunderbans have been approved by the Ministry. First phases of these projects aggregating to 1 MW and 100 KW capacities respectively have already been commissioned. No other proposal is pending with the Ministry with regard to wind power projects. Thrust will be given to development of wind diesel hybrid projects in remote, far flung areas including Islands, in the 10th Plan. Detailed Project Reports are being prepared for development of such projects in Andaman & Nicobar and Lakshadweep Islands

The proposal for a 3 MW tidal power project submitted by WBREDA is under consideration of the Ministry. Details about the current status are given in reply to Recommendation Sl. No.24

Regarding the recommendation of the Committee for 90% grant for all non-conventional energy projects in the Sunderbans area, the matter has been taken up with Planning Commission.

The recommendation of the Committee regarding replication of Sunderbans type of projects in other parts of the country has been noted. The experience of the Sunderbans area has been taken into account in planning of the Village Electrification Programme for similar far-flung and remote areas.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

**Recommendation (S.No. 24, Para 2.92a)**

The Committee have learnt that Durgaduani Tidal project (3.0 MW) at Sunderbans is pending with the Ministry for approval. The project would prove a boon for the people living in Sunderbans which cannot be electrified through conventional grid power. Considering the fact, that this would be the first Tidal Power Project in the country, the Committee recommend that this project should be treated as a 'Demonstration Project', and cent-per-cent grant be provided by the Central Government. Similar demonstration project may also be taken up in other parts of the country.

**Reply of the Government**

The Ministry have got a Detailed Project Report prepared for a 3 MW Tidal Power Project at Durgadauni creek in Sunderbans area of West Bengal. The Detailed Project Report has been examined in the Ministry and been referred for review by an independent Committee of Experts constituted by the Ministry under the Chairmanship of Member (Hydro), CEA, New Delhi; Further action would be taken as per the recommendations of the Committee.

[Ministry of Non-Conventional Energy Sources  
O.M. No. 8/4/2002-P&C Dated : 8.11.2002]

NEW DELHI;  
February 14, 2003  
Magha 25, 1924 (Saka)

SONTOSH MOHAN DEV,  
Chairman,  
Standing Committee on Energy.

ANNEXURE I

MINUTES OF THE FIRST SITTING OF THE SUB-COMMITTEE 'F'  
ON ACTION TAKEN REPORTS OF THE STANDING  
COMMITTEE ON ENERGY (2003) HELD ON 14TH FEBRUARY,  
2003 IN COMMITTEE ROOM 'E', PARLIAMENT HOUSE  
ANNEXE, NEW DELHI

The Sub-Committee met from 15.00 hrs. to 15.30 hrs.

PRESENT

Shri Sontosh Mohan Dev - *Chairman*

Shri Tilakdhari Prasad Singh - *Convenor*

MEMBERS

3. Shri Vijayendra Pal Singh Badnore  
Shri Santosh Bagrodia

SECRETARIAT

1. Shri P.K. Bhandari *Director*
2. Shri R.S. Kambo *Under Secretary*

2. At the outset, the Chairman, Sub-Committee 'F' on Action Taken Reports of the Standing Committee on Energy welcomed the Members to the first sitting of the Sub-Committee.

3. The Sub-Committee then took up for consideration the following draft Reports:-

- (i) Action Taken Report on the recommendations contained in the 25th Report (13th Lok Sabha) on the subject "Nuclear Power Generation — Targets and Achievements".



- (ii) Action Taken Report on the recommendations contained in the 26<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on the subject "Small Hydro Power Programme — An Evaluation".
- (iii) Action Taken Report on the recommendations contained in the 27<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on Demands for Grants (2002-03) of the Department of Atomic Energy.
- (iv) Action Taken Report on the recommendations contained in the 28<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on Demands for Grants (2002-03) of the Ministry of Non-Conventional Energy Sources.
- (v) Action Taken Report on the recommendations contained in the 29<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on Demands for Grants (2002-03) of the Ministry of Power.
- (vi) Action Taken Report on the recommendations contained in the 30<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on Demands for Grants (2002-03) of the Department of Coal.

4. The Sub-Committee adopted the aforesaid draft Reports with minor additions/deletions/amendments.

*The Sub-Committee then adjourned.*

*ANNEXURE II*

MINUTES OF THE SECOND SITTING OF THE STANDING COMMITTEE  
ON ENERGY (2003) HELD ON 14<sup>TH</sup> FEBRUARY, 2003 IN  
COMMITTEE ROOM 'E', PARLIAMENT HOUSE  
ANNEXE, NEW DELHI

The Committee met from 16.00 hrs. to 17.00 hrs.

PRESENT

Shri Sontosh Mohan Dev — *Chairman*

MEMBERS

2. Shri Vijayendra Pal Singh Badnore
3. Shri Lal Muni Chaubey
4. Shri Bikash Chowdhury
5. Shri Ali Mohmad Naik
6. Shri Harpal Singh Sathi
7. Shri Tilakdhari Prasad Singh
8. Shri Manoj Sinha
9. Shri B. Venkateshwarlu
10. Shri Devdas Apte
11. Shri Sontosh Bagrodia
12. Shri Jayanta Bhattacharya
13. Shri Dara Singh Chauhan
14. Shri Ajay Maroo
15. Shri B.J. Panda
16. Shri Gaya Singh

SECRETARIAT

1. Shri P.K. Bhandari                      *Director*
2. Shri R.S. Kambo                        *Under Secretary*

2. At the outset, the Chairman, Standing Committee on Energy welcomed the Members to the sitting of the Committee.

3. The Committee then took up the following draft Reports as adopted by the Sub-Committee, already considered and adopted by the Sub-Committee 'F' on Action Taken Reports, for consideration:—

- (i) Action Taken Report on the recommendations contained in the 25<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on the subject "Nuclear Power Generation — Targets and Achievements".
- (ii) Action Taken Report on the recommendations contained in the 26<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on the subject "Small Hydro Power Programme — An Evaluation".
- (iii) Action Taken Report on the recommendations contained in the 27<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on Demands for Grants (2002-03) of the Department of Atomic Energy.
- (iv) Action Taken Report on the recommendations contained in the 28<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on Demands for Grants (2002-03) of the Ministry of Non-Conventional Energy Sources.
- (v) Action Taken Report on the recommendations contained in the 29<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on Demands for Grants (2002-03) of the Ministry of Power.
- (vi) Action Taken Report on the recommendations contained in the 30<sup>th</sup> Report (13<sup>th</sup> Lok Sabha) on Demands for Grants (2002-03) of the Department of Coal.

4. The Committee adopted the aforesaid draft Reports with minor additions/deletions/amendments.

5. The Committee also authorized the Chairman to finalise the above-mentioned Reports after making consequential changes arising out of factual verification by the concerned Ministries/Departments and to present the same to the House of Parliament.

*The Committee then adjourned.*

ANNEXURE III  
[Vide Para 4 of Introduction]

*Analysis of Action Taken by the Government on the recommendations  
contained in the Twenty-eighth Report of the Standing Committee  
on Energy (Thirteenth Lok Sabha)*

(i) Total No. of Recommendations made	29
(ii) Recommendations that have been accepted by the Government (Vide Recommendation at Sl. Nos. 1, 2, 3, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 25, 26, 27, 28 & 29)	18
Percentage of total	
(iii) Recommendations which the Committee do not desire to pursue in view of the Government's replies (Vide Recommendations at Sl. Nos. 6, 7, 8 & 9)	4
Percentage of total	
(iv) Recommendations in respect of which replies of the Government have not been accepted by the Committee (vide recommendations at Sl. Nos. 5 & 22)	2
Percentage of total	7%
(v) Recommendations in respect of which final replies of the Government are still awaited (Vide recommendations at Sl. Nos. 4, 20, 21, 23 & 24)	5
Percentage of total	