44

STANDING COMMITTEE ON ENERGY
(2004)

THIRTEENTH LOK SABHA

MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES

DEMANDS FOR GRANTS (2003-2004)

[Action Taken by the Government on the recommendations contained in the Thirty Ninth Report of the Standing Committee on Energy (Thirteenth Lok Sabha)]

FORTY-FOURTH REPORT

LOK SABHA SECRETARIAT
NEW DELHI

February, 2004/*Magha*, 1925 *(Saka)*

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Presented to Lok Sabha on 4.2.2004

Laid in Rajya Sabha on 4.2.2004

LOK SABHA SECRETARIAT
NEW DELHI

February, 2004/Magha, 1925 (Saka)

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SECRETARIAT

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2. Shri P.K. Bhandari — *Director*
3. Shri R.S. Kambo — *Deputy Secretary*
4. Shri R.K. Bajaj — *Under Secretary*
5. Shri N.K. Jha — *Committee Officer*

INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorised by the Committee to present the Report on their behalf, present this Forty-Fourth Report (Thirteenth Lok Sabha) on the Action taken by the Government on the recommendations contained in the Thirty Ninth Report of the Standing Committee on Energy on Demands for Grants (2003-2004) of the Ministry of Non-Conventional Energy Sources.

2. The Thirty Ninth Report of the Standing Committee on Energy was presented to Lok Sabha on 8th April, 2003. Replies of the Government to all the recommendations contained in the Report were received on 19th November, 2003.

3. The Standing Committee on Energy considered and adopted this Report at their sitting held on 29th January, 2004.

4. An Analysis on the Action Taken by the Government on the recommendations contained in the Thirty Ninth Report of the Committee is given at Annexure-II.

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

NEW DELHI;
February 3, 2004
Magha 14, 1925 *(Saka)*

SONTOSH MOHAN DAV,
Chairman,
Standing Committee on Energy.

CHAPTER I

REPORT

This Report of the Committee deals with action taken by the Government on the recommendations contained in the Thirty-Ninth Report (Thirteenth Lok Sabha) of the Standing Committee on Energy on "Demands for Grants (2003-2004) of the Ministry of Non-Conventional Energy Sources" which was presented to Lok Sabha on 8th April, 2003.

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 which have been accepted by the Government:—

Sl. Nos. 1, 5, 6, 7, 10, 12, 13, 14, 15 and 16.

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

Sl. Nos. 4, 8, 9 and 11.

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

Sl. Nos. 2 and 3.

(iv) Recommendation/Observation in respect of which final reply of the Government is still awaited:—

Sl. No. 17.

3. The Committee desire that final replies in respect of the recommendations, which have been categorized as interim replies by the Committee 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 made in the Thirty-Ninth Report.

A. Uneven Utilization of Budgetary Allocation

Recommendation (Sl. No. 1, Para No. 2.22)

6. The Committee expressed their concern over the uneven utilization of Budgetary Allocation during each quarter of the Financial year. The utilization of Budget during the first quarter of the financial year 2002-2003 was zero. During the 2nd and 3rd quarter of the year 2002-2003, it was Rs. 75.12 crore and Rs. 51.12 crore against Rs. 151.64 crore and Rs. 59.54 crore respectively during the year 2001-2002. Thus, Rs. 270.41 crore out of Rs. 494.16 crore (RE) and Rs. 126.24 crore out of Rs. 468.29 crore were spent during the first three quarters of the years 2001-2002 and 2002-2003 respectively. The major reasons attributed for uneven utilization of funds in each quarter was the delay in issuing scheme sanction during the year 2002-2003. The Committee were of the view that this unhealthy trend of not spending any amount during the first quarter of a financial year and rushing through major expenditure in the last quarters, especially in the months of February and March, was against the financial rules of the Government of India. The Committee recommended that MNES should take proactive steps and hold extensive discussions with the Ministry of Finance and Planning Commission for finding ways and means to eliminate such aberration in budgetary mechanism.

7. In their Action Taken Reply, the Ministry of Non-Conventional Energy Sources have, *inter-alia*, stated that the Ministry took immediate steps during 2003-04 and issued continuation orders for various schemes/programmes during 2003-04 on the 28th March 2003 itself. As a result, administrative approval for continuation of various schemes/ programmes were issued in time. It was further been informed to the Committee that physical and financial targets are being reviewed by the Planning Commission which helps in finding ways and means to spread over expenditure evenly during each quarter. It is expected that major funds would be released before 31st March, 2004.

8. The Committee have taken note of the various steps taken by the Ministry of Non-Conventional Energy Sources (MNES) to give administrative approval for issuing of various schemes/programmes well in time and hope that it will be helpful, to some extent, in facilitating the proper utilization of funds during the ensuing financial year. The Committee, however, find that they did not hold any discussions with the Planning Commission and the Ministry of Finance for finding out ways and means to solve the problems of uneven utilization of allocated funds in each quarters of the financial

year on a permanent basis. Reiterating their earlier recommendation, the Committee strongly recommend that MNES should hold extensive discussions with the Ministry of Finance and Planning Commission now in the matter. The Committee would like to be apprised of the final outcome in this regard.

B. Mobilisation of Low Cost Funds

Recommendation (Sl. No. 2, Para 2.23)

9. The Committee noted that the average cost of acquisition of funds by IREDA during 2002-2003, was 9.55%, as against average lending rate of 11.99% giving a margin of 2.44%. As per assessment made by IREDA, the average lending rate during 2003-2004 was expected to come down to 11.32% and the average borrowing rate to 8.69%, giving a margin of 2.63%. The Committee found that in such an event, the margin of earning was going to increase from 2.44% to 2.63%. The Committee had observed that in spite of being a developmental agency, the lending rates of IREDA was more than commercial financial institutions, which charged anything between 9% to 9.5% as against IREDA's lending rate of 11.32%. Even REC lend at 9.2%. As a result, an entrepreneur was tempted to approach commercial FIs for obtaining loans rather than to IREDA. This raised a question of very existence of developmental agency like IREDA which was totally dedicated to the cause of renewable energy. The Committee, therefore, felt that the difference between the cost of acquisition and lending of funds should not in anyway exceed 2%. The Committee were of the view that IREDA has now become a commercial financial institution, rather than a developmental promoting agency. The Committee viewed this seriously and recommended that ways and means should be found out to correct this imbalance, lest the goal to source 10% power by 2012 would remain a distant dream. It was in this context, the Committee recommended that the Government should reduce the rate of interest through mobilization of low cost funds like Equity, Tax Free Bonds, Infrastructure and Capital Gains Bonds, etc.

10. In their Action Taken Reply, the Ministry of Non-Conventional Energy Sources have stated that Rs. 35.00 crore towards equity was released to IREDA. Apart from it, raising Tax Free Bonds of Rs. 50.00 crore at an interest rate of 6% per annum during 2002-03. During 2003-04, the subsidy amount has been increased to Rs. 40 crore and IREDA has once again raised Rs. 50 crore through Tax Free Bonds at an interest rate of 5.5% per annum. Further, Rs. 50.00 crore was planned to be raised through Infrastructure Bonds but as the credit rating of IREDA is low, it

was unable to go ahead with its plans. It has also been informed to the Committee that steps are being taken by IREDA to lower its cost of borrowing by pre-paying high rate foreign loans from funds borrowed from the domestic market. Furthermore, IREDA's competitiveness is not at stake as it still remains one of the major players in the field of financing renewable energy projects, systems and devices. One problem IREDA faces is from a low level of recovery which could eventually impact its rate of lending by way of increased margins. However, all recovery steps are being taken to ensure that IREDA takes its job of recovery very seriously.

11. The Committee have noted the various steps taken by the IREDA to mobilize low cost funds like Equity and Tax-Free Bonds. The Committee feel that IREDA does not pass on the benefit of their steadily increasing margin of earning from 2.44% to 2.63% to their consumers. It is further noted by the Committee that despite their low credit rating and dismal performance of recovery rate, IREDA is yet to accept their uncompetitiveness because they still remain a big player in financing the renewable energy sector. The Committee, therefore, desire that concerted efforts should be made by IREDA to improve not only their credit rating but also recovery of loans. At the same time, IREDA should retire their high rate debt, taking advantages of falling interest regime. The Committee are of the view that this singular step would reduce the servicing cost of IREDA, to a large extent. The Committee also desire that IREDA being development promoting agency, result oriented steps should be taken to raise low cost funds through infrastructure and capital gains bonds, equity and Tax-Free Bonds. At the same time, the Committee recommend that the benefits accrued through raising of low cost funds should be passed on to the consumers and the margin of earning should not in any way exceed 2%.

C Equity of IREDA

Recommendation (Sl. No. 3, Para No. 2.24)

12. The Committee had considered that the equity base of IREDA which was Rs. 35 crore too meagre and the proposal of Government to infuse additional Rs. 5 crore as equity, might not help to tide over the situation. Considering that some of PSUs like HUDCO had a large equity base of as much as Rs. 1000 crore, there was no justification of pegging it at Rs. 40 crore for IREDA, especially when renewable sources had to be promoted. The Committee had, therefore, recommended that equity of IREDA should be increased to at least Rs. 300 crore within three years and bonds issued by IREDA was specified as long term assets.

13. In their Action Taken Reply, the Ministry of Non-Conventional Energy Sources have stated that the equity base of IREDA at the end of 9th Plan was Rs. 250.35 crore. An amount of Rs. 250.00 crore has been allocated towards equity of IREDA for the 10th Plan period. An amount of Rs. 35.00 crore was released during 2002-03 and Rs. 40.00 crore is being released during 2003-04.

14. The Committee find that the equity base of IREDA remained static at Rs. 250 crore, both during 9th Plan and 10th Plan periods. The Committee are at a loss to understand as how IREDA, which is the prime lending financial institution, catering to the needs of Non-Conventional Sources of Energy exclusively, will service the sector, with such a low equity base, especially when the plans and programmes of the Government are being oriented to achieve/attain, at least 10% of total power produced from renewable sources. The Committee find that MNES have neither contested their recommendations to enhance equity base of IREDA to Rs. 300 crore. within three years nor adduced any reasoning therefor. The Committee do not approve of this. Considering that when agencies like HUDCO can operate with large equity base of Rs. 1000 crore, there is no justification, whatsoever, to deny it to IREDA. The Committee, therefore, reiterate their earlier recommendation and desire that equity base of IREDA should be increased to atleast Rs. 300 crore within three years and at the same time, the bonds issued by them be specified as long term assets.

D. Rise in prices of Non-Conventional Energy Sources Products and Devices

Recommendation (Sl. No. 5, Para No. 2.26)

15. The Committee were at a loss to understand the rise in prices of various systems of renewable energy like Solar Water Heater and Biogas, in spite of heavy subsidy being offered for the purpose. In the opinion of the Committee, the subsidy regime was turning out to be infructuous, when the systems had become out of reach of common masses. The Committee felt that there was a pressing need for identifying and immediate addressing of technology-specific barriers, etc. which could be removed through research and development, capacity building and awareness building programmes. The Committee recommended that Government should reassess the reasons, for rise in prices of commonly used system and take corrective action, so that these systems were affordable by consumers.

16. In their Action Taken Reply, the Ministry of Non-Conventional Energy Sources have stated that they have initiated the process of holding discussions with manufacturers and other stake holders for reducing the cost of renewable energy systems/devices. The Ministry have also been identifying technology specific barriers which can be removed through Research and Development, capacity building and awareness building programmes.

17. The Committee find that high initial capital cost of Non-Conventional Sources of Energy products and devices, is a disincentive in their popularization and promotion. The prices of some of the devices and products have risen exorbitantly, especially of Biogas Plant and Solar Water Heater in the recent past, thus making them unaffordable for the common masses. The Committee are of the view that the current subsidy regime, which the Non-Conventional Energy Sources products and devices are subjected to would remain infructuous, unless and until, the affordability of them is ensured. It is in this context, the Committee welcome the initiative taken by the Ministry in holding discussions with the manufacturers and other stake holders for reducing the cost of renewable energy system/ devices. Further, the Ministry is also identifying the technology specific barriers which can be renewed through R&D, capacity building and awareness building programmes. The Committee would like to be apprised of the outcome thereof.

E. Participation of Private Sectors in Promoting Renewable Sources of Energy

Recommendation (Sl. No. 7, Para No. 2.8)

18. The Committee observed that private sector participation was pre-requisite for spread of renewable energy technologies on a larger scale. This would happen only if (i) the potential market size was large so that there were ample potentialities of making profit, (ii) the risk involved was marginal and, preferably, some insurance cover for risk is provided and most importantly, (iii) there were minimal Government regulations and procedures. The Committee observed that renewable energy technologies such as solar cookers, improved chulhas, community biogas, etc. which were not profitable to the private sector, particularly, rural entrepreneurs, in all locations. The Committee desired that in such situations, the Government had to take the initiatives and directly support the spread of technologies which have a useful social impact. The Committee recommend that in order to offset the inadequacy of funds provided for harnessing of different

NCES potentialities, the different promotional incentive schemes should be re-oriented and highlighted through powerful awareness and education programme amongst the potential users to create demand for renewable systems. The Committee desired that big-Corporate House should be encouraged and involved in capital intensive industry for manufacture of wind turbines, SPV modules, solar water heater for big industries and rural entrepreneurs for servicing and maintenance of SPV, solar water heaters and gasifiers in the field. The Committee recommended that the strategies for promoting renewables had to be worked out separately for such technology depending upon the state of maturity of technology, the risk involved and their profitability. The Government should also consider providing adequate insurance cover for risks involved in private sector participation in promoting emerging technologies.

19. In their Action Taken Reply, the Ministry of Non-Conventional Energy Sources have stated that under the present policies, fiscal and promotional incentives have generated a significant response from the private sector. In pursuance of the guidelines issued by this Ministry, 17 States have already announced policies for the private/commercial power projects. A package of incentives has also been introduced which includes tax concessions such as 80% accelerated depreciation, tax holiday, custom and excise duties and sales tax relief, subsidized term loans or direct subsidies for various programmes. The Ministry also provide financial assistance for carrying out resources assessments; preparation of Feasibility Studies and Detailed Project Reports; organization of seminars and business meets to create awareness about the development and deployment of various new and renewable energy technologies. It has been further informed to the Committee that the Ministry interact with State Governments, State Nodal Agencies, State Electricity Boards and Financial Institutions on a continuous basis and with SERCs to remove bottlenecks and streamline procedures for accelerated clearance of projects; allotment of land; provision of power evacuation facilities; and environmental clearance. The technology and facilities for design, manufacture, supply, erection, operation and maintenance of some technologies is indigenously available. Most wind power systems have foreign designs and require huge outflow of foreign exchange. The Ministry are seized of the matter and its eventual aim is to make each technology a net exporter rather than a net importer, as at present. Its R&D Advisory Committee has recently set up sectoral panels to focus more on the sectoral aspects of in depth research with the eventual aim of indigenizing technologies for all renewable energy systems and devices.

20. The Committee observe that despite the various efforts undertaken by the Government to encourage private sectors participation in the renewable energy sectors, they have failed to show the desirable result. The Committee note that only 17 States so far have declared their policy for private sectors participation in the renewable energy field. Even in these States, their participation are not upto the mark. The Committee are, therefore, not satisfied with the present policies, fiscal and promotional incentives, provided for the participation of private sectors in the renewable energy field. The Committee, therefore, recommend that there is need to further modify/restructure the present policies/incentives so that these may act as an incentive in promoting renewable energy on a large scale. The Committee are strongly of the opinion, as expressed earlier, that private sectors participation can be enhanced only through stepping up the demand of renewable energy, so that there are ample opportunities of making profits. It is in this context, the Committee had recommended multi-prong strategies for promoting renewable energy sources, taking into consideration the state of maturity of technology, risk involved and the profitability etc. An insurance cover for private sector was also suggested to cover risk involved in this venture. The Committee find that Government have not taken their suggestion in a right perspective and no serious efforts undertaken in this regard. Reiterating their earlier recommendation, the Committee desire that necessary steps should be initiated so as to ensure ample scope for participation by enterpreneurs. Further, in order to encourage large scale participation of private sector in the field, adequate insurance cover be extended to them to tide over the risk involved in the sector.

F. Installation of SPV Water Pumping Systems for Safe Drinking Water

Recommendation (Sl. No. 10, Para No. 2.51)

21. Taking note of use of SPV water pumping system for Safe Drinking Water the Committee had recommended that the Ministry of Non-Conventional Energy Sources together with the Ministry of Rural Development should identify the villages having no safe drinking water facilities and chalk out a time-bound Action Plan thereon.

22. In their Action Taken Reply, the Ministry of Non-Conventional Energy Sources have, *inter-alia*, stated that the Department of Drinking Water Supply, Ministry of Rural Development was consulted for identifying the villages having no safe drinking water facility and for chalking out a time bound plan of action to provide safe drinking water in remote villages where SPV water pumping can be deployed. It has been stated by the Department of Drinking Water Supply (DDWS) that

supply of drinking water is a State subject and the State Governments are the implementing agencies for the same. The State Governments choose appropriate technologies for coverage of rural habitations with the facility of drinking water supply according to the specific requirements of the area in question. However, the DDWS has now suggested working out a joint action plan to deploy such systems wherever feasible in consultation with the State Governments.

23. The Committee have noted that the Ministry of Non-Conventional Energy Sources (MNES) have consulted the Department of Drinking Water Supply (DDWS), Ministry of Rural Development for identifying the villages having no safe drinking water facilities and for deploying SPV water pumping system to provide safe drinking water in a time-bound manner. As the supply of drinking water is a State subject, the DDWS have rightly suggested the MNES to involve the concerned State Governments also to formulate Joint Action Plan to deploy SPV systems wherever feasible. Appreciating the efforts of MNES and the suggestions of DDWS, Ministry of Rural Development, the Committee recommend that Government should commit themselves in providing safe drinking water through the use of SPV water pumping system to all the identified villages in a time-bound manner. The Committee would also like to be informed of the action taken in this regard.

G. Promotion of Solar Power Programme

Recommendation (Sl. No. 12, Para No. 2.53)

24. Taking into consideration the high initial operational and maintenance costs of Solar Photovoltaic and Solar Thermal Power Projects, the Committee had emphasized that the Ministry should adopt two-pronged approach to promote the Solar Power Programme. At one end, the Ministry should provide adequate Research and Development (R&D) support to improve the efficiency, reliability and to reduce costs and on the other end, they should declare long term consumer friendly policy. The Committee, therefore, desired that Ministry should find ways and means for reducing the high cost, encourage the participation of private sectors in the field of installation, maintenance and manufacturing of different parts and components of solar system.

25. The Ministry, in their Action Taken Reply, have stated that this Ministry already have a scheme for providing interest subsidy to SPV manufacturers in order that this can eventually lower the cost of their products. However, as regards private sector participation in SPV Power projects, there is unlikely to be much interest in solar power

projects at this juncture as the capital costs of such projects are still very high and the capacity utilization factor is low. In such a scenario, the utilities may not be either willing or in a position to provide higher tariff that will be required to make these projects viable. Furthermore, the Ministry provide funds to IREDA to enable loans at reduced interest rates to be provided for the manufacture of solar cells, modules, silicon materials and wafers. The scheme aims at encouraging investments in projects that hold promise of cost reduction through large volume production.

26. The Committee have, *inter-alia*, noted that high initial cost and low capacity utilization are the twin important factors responsible enough to discourage the participation of private sectors in the SPV programme. The Committee, therefore, recommend that the Ministry should devise ways and means to reduce cost. R&D efforts are also required for sustaining the system. The Committee have further noted that the Ministry of NCES is providing funds to IREDA to enable them to extend loans at reduced interest rates. However, the interest rate as charged by IREDA, the sole funding agency in renewable energy field, is much higher than that of the other Financial Institutes and commercial banks. The Committee, therefore, recommend that the interest rates as charged by IREDA should be brought down, in view of softening of interest rates. The Committee would like to be apprised of the action taken in the matter.

H. Promotion of Non-Conventional Energy Sources in North-Eastern Region

Recommendation (Sl. No. 16, Para No. 2.80)

27. It was found by the Committee that the Ministry had allocated 10% of Gross Budgetary Support for the Development of the North-Eastern States including Sikkim and higher Central Financial assistance @ 90% grant and 10% loan for all renewable energy in the region. It was also learnt that special package was formulated by Indian Renewable Energy Development Agency (IREDA) with concessions on the incentives such as rebate of 1% per annum in interest rate, exemption from payment of registration fee and other charges, concessions of 5% per annum in promoters contribution, financial support up to 50% of the total cost of the preparation for Detailed Project Reports (DPRs), subject to a maximum of Rs. 3.00 lakhs. But the Committee were very perturbed to note that none of the Renewable Energy Programmes except a very few had been able to achieve their target, since 2000-2001. Some of the reasons attributed for these under achievements were higher cost and

time delays on account of logistic issues, weak private sector investments, States un-willing or unable to provide matching funds, law and order problems and due to the low absorptive capacity of the region. The Committee had, therefore, desired that the Government should take concerted efforts to remove such bottlenecks.

28. The Ministry of Non-Conventional Energy Sources, in their Action Taken Reply, have stated that the Ministry is making all efforts to remove bottlenecks in successful implementation of renewable energy projects in North-Eastern region. The State Government Department/ Nodal Agencies are also making their efforts to create awareness and publicity to motivate people to use renewable energy systems/ devices and ensuring proper operation and maintenance.

29. The Committee find that despite 10% Gross Budgetary Support of a Ministry/Deptt. of Government of India and higher Central Financial Assistance @ 90% Grants and 10% loans, for all renewable energy products, in the North-Eastern Region, the penetration of renewable is not on expected lines. Further, concessional loans extended by IREDA, have failed to enthuse North-Eastern Region, in capitalizing the renewables. It is in this context, the Committee recommend that MNES should *suo-moto* take up the matter with the State Regulatory Electricity Commissions (SRECs) of the North-Eastern Region, and prevail upon them to source at least 10% of power produced in the region from different renewable sources of energy. In the opinion of the Committee, this will act as a catalyst in furthering and promoting the cause of renewables in the North-Eastern Region. The Committee would like to be apprised of the action taken in the matter.

CHAPTER II

RECOMMENDATIONS/OBSERVATIONS THAT HAVE BEEN ACCEPTED BY THE GOVERNMENT

Recommendation (Sl. No. 1, Para No. 2.22)

The Ministry of Non-Conventional Energy Sources (MNES) have presented Demands for Grants of Rs. 630.15 crore for the year 2003-2004 against the Budget Estimate (BE) of 629.52 crore and Revised Estimates (RE) of Rs. 473.56 crore during the year 2002-2003. MNES has been assigned a target of capacity addition to the tune of 470.75 MW of power from renewables during 2003-2004 as against the target of 400.75 MW during the year 2002-2003. Electrification of 1,000 remote villages have also been proposed during 2003-2004 as against the target of 500 villages during 2002-2003. The Committee are, however, in doubt whether such targets would be achieved during 2003-2004, taking into consideration their past track record. For instance, MNES could spent just Rs. 322.40 crore as Domestic Budgetary Support out of Rs. 339.25 crore, during 2001-2002. The performance of MNES during 2002-2003, is nothing short of dismal, as it could utilize only Rs. 162.94 crore (as on 28.02.2003) of total allocation of Rs. 475.25 crore of Domestic Budgetary Support. Sadly, the utilization, during first quarter of 2002-2003 was zero. During the 2nd and 3rd quarter of the year 2002-2003, it was Rs. 75.12 crore and Rs. 51.12 crore against Rs. 151.64 crore and Rs. 59.54 crore respectively during the year 2001-2002. Thus, Rs. 270.41 crore out of Rs. 494.16 crore (RE) and Rs. 126.24 crore out of Rs. 468.29 crore were spent during the first three quarters of the years 2001-2002 and 2002-2003 respectively. For the two months January-February, the utilization level during the year 2002-2003 was twice the level of the previous year. The major reasons attributed for uneven utilization of funds in each quarter is the delay in issuing scheme sanction during the year 2002-2003. The Committee are of the view that this unhealthy trend of not spending any amount during the first quarter of a financial year and rushing through major expenditure in the last quarters, especially in the months of February and March, is against the financial rules of the Government of India. The Committee are of the considered opinion that there has been system failure on a large scale in such cases. The Committee recommend that MNES should take proactive steps and hold extensive discussion with the Ministry of Finance and Planning Commission for finding ways and means to eliminate such aberration in budgetary mechanism. The Committee would like to be apprised of the action taken by the Government in this regard.

Reply of the Government

The Ministry took immediate steps during 2003-04 and issued continuation orders for various schemes/programmes during 2003-04 on the 28th March 2003 itself. As a result, administrative approval for continuation of various schemes/programmes were issued in time.

Action has been initiated to bring down the prices of SPV systems and devices to be usded in all its programmes that make use of SPV modules apart from smoothening the rough edges of the delivery system at the State and beneficiary level in order that targets – both financial and physical – are achieved.

In addition, physical and financial targets are being reviewed by the Planning Commission which helps in finding ways and means to spread over expenditure evenly during each quarter. It is expected that major funds would be released before 31st March, 2004.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/ 2003-P&C, dated 19.11 2003]

Comments of the Committee

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

Recommendation (Sl. No. 5, Para No. 2.26)

The Committee observe that the renewable energy systems are new emerging field of technology to meet the ever growing requirement of energy to the millions of people living across the globe. But these systems suffer with various barriers. High initial cost is a serious barrier for SPV, Solar Water Heater and Biogas. Back-up or storage Systems are expensive and therefore a barrier to SPV. The Committee are perturbed to note that the cost of Biogas Plant (average size 2 cu meters) have increased from Rs. 5,500-6,500 during 1990 to Rs. 8,500-11,000 during 2000. Similarly, there has been rise in cost of Solar Water Heater (100 liter capacity) which increased from Rs. 12,000 during 1990 to Rs. 16,000-18,000 during 2000. Also the cost of Solar Cooker (box type) has risen from Rs. 1000 to Rs. 1500 without electric back-ups during the same period. The Committee are at a loss to understand the rise in prices of various systems of renewable energy, in spite of heavy subsidy being offered for the purpose. In the opinion of the Committee, the subsidy regime is turning out to be in fructuous, when the systems have become out of reach of common masses. The Committee feel that there is a pressing need for identifying and immediate addressing of technology-specific barriers, etc. which can be removed through research and development, capacity building and awareness building programmes. The Committtee recommend that

Government should reassess the reasons, for rise in prices of commonly used system and take corrective actions, so that these systems are affordable by consumers.

Reply of the Government

The Ministry has initiated the process of holding discussions with manufacturers and other stake holders for reducing the cost of renewable energy systems/devices. The Ministry is also identifying technology specific barriers which can be removed through Research and Development, capacity building and awareness building programmes.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/ 2003-P&C, dated 19.11 2003]

Comments of the Committee

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

Recommendation (Sl. No. 6, Para No. 2.27)

The Committee observe that Customs Duty exemption on some of the items like inverters of 90% efficiency and above for manufacture of PV systems, anodized high reflection Al sheet for manufacture of solar cookers, components of electric vehicles, etc., have not been accepted by the Government on account of their multiple end-use. The Committee feel that it is improper to deny Customs Duty exemption on the above mentioned items soley because the items have multiple end-use. The Committee desire that Government should find ways and means so as to ensure that equipments and gadgets, used for renewal sectors, are exempted from Customs Duties. The Committee also find that in some of the cases, Renewable Systems are exempted from Customs Duty but he spares are subjected to such levies. The Committee do not approve this and recommend that Customs Duty exemption or reduction should be allowed not only for the renewable energy systems as a whole but also for spares.

Reply of the Government

Certain spares of wind electric generator are already covered by concessional custom duty. The Ministry has been making proposals for custom duty exemption or reduction to be allowed not only for other renewable energy systems as a whole but also for spares and has been successful in obtaining several concessions for domestic manufacturers/assemblers from time to time on account of the reasonable stand taken in matter by the Ministry of Finance. It is only

where that Ministry has had genuine reasons that all proposals but forwarded by this Ministry could not be accepted.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/2003-P&C, dated 19.11 2003]

Recommendation (Sl. No. 7, Para No. 2.28)

In regard to the participation of private sectors in the field of promotion and development of the renewable energy sector, the Committee observe that there is a realization in India, as well as elsewhere that for the large scale spread of renewable energy technologies, private sector participation is a must. It will happen only if (i) the potential market size is large so that there are ample potentialities of making profit, (ii) the risk involved is marginal and, preferably, some insurance cover for risk is provided and most importantly, (iii) there are minimal Government regulations and procedures. The Committee observe that there are renewable energy technologies such as solar cookers, improved chulhas, community biogas, etc., which may not be profitable to the private sector, particularly, rural entrepreneurs, in all locations. The Committee desire that in such situations, the Government have to take the initiatives to directly support the spread of technologies which have a useful social impact. When the Government is not able to meet with much success, NGOs and through them the rural entrepreneurs should be motivated as an alternative approach. In order to offset the inadequacy of funds provided for harnessing of different NCES potentialities, the different promotional incentive schemes should be reoriented and highlighted through powerful awareness and education programme amongst the potential users to create demand for renewable systems. The Committee have also observed that the Government have played a role of facilitator in the Wind Energy Sector, while the field of manufacturing, marketing, sales, maintenance and servicing of the Wind Energy Sectors have been left for the private developers. In fact, it is this sector which is an example of successful private sector participation in the dissemination of renewable energy systems in the country. The Committee are of the opinion that there are different levels at which the private sector participation is necessary from technology development to marketing to servicing. Big-Corporate House should be encouraged and involved in capital intensive industry for manufacture of wind turbines, SPV modules, solar water heater for big industries and rural entrepreneurs for servicing and maintaining SPV, solar water heaters and gesifiers in the field. The Committee recommend that the strategies for promoting

renewables have to be worked out separately for each technology depending upon the state of maturity of technology, the risk involved and their profitability. The Government should also consider providing adequate insurance cover for risks involved in private sector participation in promoting emerging technologies. There is need to classify non-conventional energy sector, as infrastructure sector, for the promotion of renewable energy. The Committee desire that Government should formulate an action plan in this regard and they be apprised of the outcome thereof.

Reply of the Government

The present policies, fiscal and promotional incentives have generated a significant response from the private sector. In pursuance of the guidelines issued by this Ministry, 17 States have already announced policies for the private/commercial power projects. A package of incentives has also been introduced which includes tax concessions such as 80% accelerated depreciation, tax holiday, custom and excise duties and sales tax relief, subsidized term loans or direct subsidies for various programmes. The Ministry also provides financial assistance for carrying out resources assessments; preparation of Feasibility Studies and Detailed Project Reports; organization of seminars and business meets to create awareness about the development and deployment of various new and renewable energy technologies.

The Ministry interacts with State Governments, State Nodel Agencies, State Electricity Boards and Financial Institutions on a continuous basis and with SERCs to remove bottlenecks and streamline procedures for accelerated clearance of projects; allotment of land; provision of power evacuation facilities; and environmental clearance. The technology and facilities for design, manufacture, supply, erection, operation and maintenance of some technologies is indigenously available. Most wind power systems have foreign designs and require huge outflow of foreign exchange. The Ministry is siezed of the matter and its eventual aim is to make each technology a net exporter rather than a net importer, as at present. Its R&D Advisory Committee has recently set up sectoral panels to focus more on the sectoral aspects of in depth research with the eventual aim of indigenizing technologies for all renewable energy systems and devices.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/ 2003-P&C, dated 19.11 2003]

Comments of the Committee

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

Recommendation (Sl. No. 10, Para No. 2.51)

The Committee are happy to learn that the Government have made a resolve to provide safe drinking water to all the villages and find that some of the SPV water pumping systems have been installed under some projects of the Department of Drinking Water Supply in the Ministry of Rural Development who is responsible for the schemes for providing safe drinking water to all the villages. The Committee find that the features of SPV water pumping technologies which is characterized by small scale capacities for decentralized applications and modular nature of the technologies are ideal for meeting the rural needs of water. But the Committee find that the list of the number of villages having no access to safe drinking water are yet to receive from Ministry of Rural Development. The Committee find that the focus of the SPV Water Pumping Programme is on agriculture and not on providing drinking water to the rural masses. The Committee desire that one of the prime focus of the SPV Water Pumping Systems should also be on providing safe drinking water in the remote/inaccessible areas. The Committee can not but deplore the way the Government have initiated a programme like SPV Water Pumping programme without having a list of the number of villages/hamlets which do not have access to safe drinking water. The Committee, therefore, recommend that the Ministry of Non-Conventional Energy Sources together with the Ministry of Rural Development should first identify the villages having no safe drinking waster facilities and should chalk out a time-bound Plan of Action to provide safe drinking water including all the inaccessible and remote areas. The Ministry should also initiate this programme in 18,000 un-electrified villages/hamlets situated in remote areas which are planned to be electrified by decentralized generation through non-conventional sources by the year 2012 AD under the Village Electrification Programme of the Ministry of Non-Conventional Energy Sources.

Reply of the Government

The Remote Village Electrification Programme being implemented by the Ministry envisages provision of electricity through different non-conventional energy technologies such as solar photovoltaics, small hydropower, biomass gasifiers and renewable energy based hybrid systems, depending upon till locally available resource. The programme areas at meeting household electricity needs and also providing electricity for community facilities like water pumping for drinking water supply, etc.

The department of Drinking Water Supply, Ministry of Rural Development was consulted for identifying the villages having no safe

drinking water facility and for chalking out a time bound plan of action to provide safe drinking water in remote villages where SPV water pumping can be deployed. It has been stated by the Department of Drinking Water Supply (DDWS) that supply of drinking water is a state subject and the State Governments are the implementing agencies for the same. The State Governments choose appropriate technologies for coverage of rural habitations with the facility of drinking water supply according to the specific requirements of the area in question. However, the DDWS has now suggested working out a joint action plan to deploy such systems wherever feasible in consultation with the State Governments.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/2003-P&C, dated 19.11 2003]

Comments of the Committee

(Please *see* Paragraph 23 of the Chapter I of the Report)

Recommendation (Sl. No. 12, Para No. 2.53)

The Committee observe that Solar Photovoltaic and Solar Thermal Power Projects have a high initial cost but low fuel, operational and maintenance costs. Further, life-cycle ost analysis may show that they are already cost effective. Given the scarce capital and high interest rates, entrepreneurs and end-users are unlikely to invest in such high first cost technologies. The situation has further worsened by the change in the policy guidelines by the Government in mid-way and also due to unattractive policy guidelines for the private sectors participation in the installation of Solar Power Projects. So far only 5 grid interactive SPV power projects aggregating to 670 KWp have been installed through private sector participation. There is also lack of indigenous capability to meet domestic demands for the critical parts and components required to install and maintain them. The Committee, would like to emphasize that the Ministry should adopt two pronged approach to promote the Solar Power Programme. At one end, the Ministry should provide adequate Research and Development (R&D) support to improve the efficiency, reliability and to reduce costs and on the other, the Ministry should declare long term consumer friendly policy guidelines also for the participation of private sectors in the installation of the solar power projects and promotion of indigenous solar industry to provide consumables and other items for their maintenance and installation. The Committee, therefore, desire that Ministry should divice a way to reduce the high first cost and encourage the participation of private

sectors in the field of installation, maintenance and manufacturing of different parts and components of solar system.

Reply of the Government

This Ministry already has a scheme for providing interest subsidy to SPV manufacturers in order that this can eventually lower the cost of their products. However, as regards private sector participation in SPV Power projects, there is unlikely to be much interest in solar power projects at this juncture as the capital costs of such projects are still very high and the capacity utilization factor is low. In such a scenario the utilities may not be either willing or in a position to provide higher tariff that will be required to make these projects viable.

Under the Solar Photovoltaic Programme, the Ministry provides funds to IREDA to enable loans at reduced interest rates to be provided for the manufacture of solar cells, modules, silicon materials and wafers. The scheme aims at encouraging investments in projects that hold promise of cost reduction through large volume production.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/2003-P&C, dated 19.11 2003]

Comments of the Committee

(Please *see* Paragraph 26 of the Chapter I of the Report)

Recommendation (Sl. No. 13, Para No. 2.54)

Solar Photovoltaic (SPV) water pumping system are technically proven and are considered to have the potential of replacing diesel pumping system, commonly used in unelectrified locations for lifting water from both shallow and deep wells. The PV pumping system can cut down the need for extending the distribution grids in dispersed rural areas and the resultant losses in transmission. The pump can also bring the benefits of irrigation and drinking water supply in backward areas not served by the existing grid and where supply of diesel is a problem. But the Committee note with serious concern that the programmes have not picked up. During the year 2001-2002, only 344 water pumping system could be installed as against the target of 800. During 2002-2003 out of the target of 1200, only 613 could be achieved by 28.2.2003. Now a target of 1600 PV water pumping system during the year 2003-2004 has fixed. The Committee is sceptical about the target fixed by the Ministry during the year 2003-2004. The Committee desire that the Government should take effective steps to implement the programme so that the annual targets fixed for the

programme could be achieved. The Committee observe that in spite of additional subsidy provided by the Government the average sale price of a 2 HP SPV water pumping system has come down from Rs. 4.3 lakh to Rs. 3.4 lakh during the year 2002-2003. A cumulative total of 5113 SPV water pumping system could only be installed within a span of 10 years. The Committee are of the view that it is still beyond the purchasing capacity of common Indian farmers. The Committee, therefore, desire that ways and means should be formed to reduce the cost of the SPV water pumping system through appropriate R&D efforts. There is also a need to increase demand of the system by spreading it over the entire length and breadth of the country particularly in the remote backward areas of the country. The Committee appreciate that 92% of the system are functional and trust that with the new stipulation of setting up of after sale services for every 100 systems, installed, the functionality level may go up.

Reply of the Government

The cost of SPV lighting systems, Water Pumping systems have been reduced on account of cost reduction of solar cells. It is learnt that one leading manufacturer has quoted only Rs. 3.15 lakh for a 2 hp, 1800 W system as against Rs. 4.3 lakh provided for the same in this Ministry's scheme for SPV water pumping systems. Efforts are underway to introduce more efficient pumps in the system in order to reduce costs.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/2003-P&C, dated 19.11 2003]

Recommendation (Sl. No. 14, Para No. 2.64)

The Committee are happy to learn that all the 18,000 villages which are believed to be in remote and difficult areas and which can not be electrified through extension of the conventional grid will be electrified through the Village Electrification Programme of the MNES. Out of the 5,000 villages which are proposed to be taken up during 10th Plan 4,000 village are proposed to be electrified through Solar Photovoltaic route. A budget of Rs. 1080 crore has been proposed for electrifying 4,000 villages through SPV systems during 10th Plan. It is estimated that on average a village may required about 7.5 kW capcity PV power plant or equivalent capacity PV system. The average cost of electrifying a village is about Rs. 30 lakh. It will, therefore, require Rs. 4000 × 30 lakh = Rs. 1200 crore for lighting up these villages during 10th Plan. Thus, there will be a gap of Rs. 120 crore (Rs. 1200—Rs. 1080 crore). The Committee was informed that the gap will be met through the use of fund available for tribal welfare and other sources. The Committee, therefore, desire that the Ministry should try to harness all the possible sources of funding meant for various

schemes/programmes relating to the welfare of rural masses, Ministries of Rural Development, Tribal welfare, Department of Woman and Child Development, MPLAD/MLALAD fund, etc. It is also learnt that more than 2400 villages/hamlets have been electrified so far with the SPV system in the sense that at least 50% of the households in each of the villages may be electrified as against the recommendation of the 15th Report of the Standing Committee on Energy (2001) (13th Lok Sabha, DFGs (2001-2002), whereunder "a village would be deemed to be electrified if at least 60% of the houses are provided with the lighting". The Committee, therefore, re-emphasized that the Ministry should strictly adhered to this definition of the Committee for declaring a village to be electrified through various Non-Conventional Energy Systems including the SPV system.

Reply of the Government

The Ministry of Power has been holding consultations with State Governments on adopting a new definition for an electrified village which specifies minimum of 10% of households to be covered along with certain other criteria. It is proposed to adopt a uniform definition for village electrification, whether electrified through conventional means or through non-conventional energy sources.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/2003-P&C, dated 19.11 2003]

Recommendation (Sl. No. 15, Para No. 2.72)

The Committee have observed that the generic barriers to renewable energy systems are characterized by lack of information, low confidence levels, perceived low performance, inadequate demonstration of field performance, etc. With a view to removing such barriers, the Renewable Energy Parks under Special Area Demonstration Programme (SADP) are being set up to demonstrate the functioning of various non-conventional energy systems and devices and create awareness among the students, teachers, rural and urban people about the use and benefits of renewable energy systems. It is further observed that out of sanctioned 278 districts level REPs, 162 are reported operational till February 2003. The number of un-operational systems is, therefore, stand at 116, which is fairly large. The Committee are of the view that success of the REPs is a must, as the people go back to the traditional systems with a vengeance, if such projects fail. The Committee, therefore, desire that the demonstration projects should be taken very carefully after assessing the suitability of various renewable systems and the attitude and ability of the institutions where REPs are to be installed and also recommend that after installation management of

the REPs should be strengthened and all the un-operational REPs should be made operational within a specified time period. It view of the crucial role that such projects have to play in the economic development of the country, the Committee suggest that Government should consider the question of giving the status of technology mission for the entire exercise of all the demonstration projects relating to the use of various Non-Conventional Energy systems and devices of the Ministry of Non-Conventional Energy Sources.

Reply of the Government

The Committee on Energy Parks constituted by the Ministry considers all the proposals for setting up of energy parks and decides upon suitability of various renewable energy systems and devices to be installed in the energy parks depending upon their utility and requirements. Moreover energy parks are set up by the organizations/ institutions which have necessary infrastructural facilities to establish and maintain the parks. Under this scheme, it is mandatory to enter into an annual maintenance contract (AMC) for a period of 10 years, excluding warranty period to ensure proper upkeep and maintenance of various systems/devices.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/2003-P&C, dated 19.11 2003]

Recommendation (Sl. No. 16, Para No. 2.80)

The Committee are happy to learn that the Ministry has allocated 10% of Gross Budgetary Support for the Development of the North-Eastern States including Sikkim. Higher Central Financial assistance @ 90% grant and 10% loan for all renewable energy is admissible in North-Eastern Region. It is also learnt that special package has been formulated by Indian Renewable Energy Development Agency (IREDA) with concessions on the incentives such as rebate of 1% per annum in interest rate, exemption from payment of registration fee and other charges, concessions of 5% per annum in promoters contribution, financial support up to 50% of the total cost of the preparation for Detailed Project Reports (DPRs), subject to a maximum of Rs. 3.00 lakhs. But the committee are very perturbed to note that none of the Renewable Energy Programmes except a very few have been able to achieve their target, since 2000-2001. Some of the reasons attributed for these under achievements are higher cost and time delays on account of logistic issues, weak private sector investments, States un-willing or unable to provide matching funds, law and order problems and due to the low absorptive capacity of the region. The Committee, therefore, desire that

the Government should take concerted efforts to remove such bottlenecks through the programmes such as mass awareness and publicity to motivate people to use various Non-Conventional energy sources (NCES) systems for their daily energy needs and also that all the States of the region should be cajoled to give top priority to these programmes and accorded matching funds for their installations.

Reply of the Government

The Ministry is making all efforts to remove bottlenecks in successful implementation of renewable energy projects in North-Eastern region. The State Government Department/Nodal Agencies are also making their efforts to create awareness and publicity to motivate people to use renewable energy systems/devices and ensuring proper operation and maintenance.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/2003-P&C, dated 19.11 2003]

Comments of the Committee

(Please *see* Paragraph 29 of the Chapter I of the Report)

CHAPTER III

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

Recommendation (Sl. No. 4, Para No. 2.25)

The Committee have observed that the Ministry/IREDA could not succeed in projecting realistic Internal and Extra Budgetary Resources (IEBR) targets. For instance, during 2000-2001 as against the target of Rs. 505.24 crore, only Rs. 429.28 crore was realized. During 2001-2002, the actual realization was increased from Rs. 362.37 crore (RE) to Rs. 435.18 crore. The Committee have further observed that the net IEBR has decreased from 476.48 crore (BE) to Rs. 419.98 crore (RE) during the year 2002-2003 on account of higher repayment of loans consisting of part prepayment of higher interest Asian Development Bank (ADB) loan in RE stage which could not take place due to incompleteness of procedural formalities. There is also decrease in external aid from Rs. 285.00 crore (RE) to Rs. 255.60 crore and in other IEBR from Rs. 424.91 crore (RE) to Rs. 300.75 crore during 2002-2003. The reasons adduced for such variations are inability of project promoters to complete the required documentation before the end of financial year. The Committee feel that the IREDA is unable to facilitate the speedier implementation of the projects in the private sector. The Committee, therefore, recommend that the MNES/IREDA should take effective steps to simplify the procedure for obtaining loan and help the project developers in completing the required documentation within the shortest time so that realistic and achievable targets are not only projected but also achieved by MNES/IREDA. At the same time the Committee desire that IREDA should review their procedure, so as to streamline the system.

Reply of the Government

Normally, IREDA sanctions a project within 90 days of registration of the same provided complete details/papers are submitted by the applicant and the project is fund viable from the technical, financial and legal angles. IREDA has already taken steps to simplify its systems and the procedures for sanctioning loan to borrowers. The information and the documents required for sanctioning loans have been listed in the loan application form itself. The power for sanctioning loans at varying levels has been delegated to Director (Technical), Director (Financial), MD and the Committee of Director. In order to expedite the process of

pre-sanction documentation, check lists with different types of borrowers have been drawn and made available to Appraisal Officers.

Regarding post-sanction formalities: —

(a) the following are notified to all borrowers through :

- IREDA Financing Guidelines
- A Brochure titled "Legal at a Glance"
- Loan Sanction Letter issued by IREDA
- IREDA loan documents

The aforesaid help the borrowers to assemble documents as per the requirements which expedites the documentation process.

(b) Clarifications, if any, sought are attended immediately through letters or queries at the Customer Facilitation Centre at IREDA.

(c) Standard Legal Documents are developed and made available to the borrowers along with Sanction Letter itself.

(d) IREDA *suo motto* fixes dates for execution of loan documents and advises borrowers to advance the date(s), if required.

(e) IREDA reviews its procedures either internally or through inside Advocates for further streamlining.

(f) Streamlining is a continuous process. M/s. Kesar Dass B. & Associates, Advocates have been engaged to review all security documents along with Legal Manual etc. and suggest modifications taking into account the recent developments like passing of the Securitization Act so as to on the one hand protect IREDA's interest in an effective manner and on the other bring to a minimum the documents obtained by IREDA. The recommendations are expected to be received by 31.12.2003 and necessary action will be taken on the same.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/ 2003-P&C, dated 19.11 2003]

Recommendation (Sl. No. 8, Para No. 2.29)

The Committee have observed that the economic of renewable energy projects/ systems is heavily dependent on Government's policies towards interest rates, accelerated depreciating, tax credits, etc. Any delay or uncertainty or dis-uniformity amongst the policies declared by

various States/Union Territory Governments do not augur well for the development of this sector as it causes reluctancy on the part of the financial institutions to take risk and invest in this sector. The Committee have further observed that the Power Finance Corporation (PFC) and the Rural Electrification Corporation (REC) are coming forward with their policies and programmes to support the emerging non-Conventional Energy Sector. But their invelvement in this sector have so far been modest. The Committee recommend that the Ministry should try to encourage their participation in this renewable energy sector also. The Committee also desire that a new pattern of relationship amongst the IREDA, a repository of all wisdoms and expertise wih regards to renewable energy systems, the PFC and the REC and also with other Financial Institutions (FIs) should be developed for the promotion and the development of this sector.

Reply of the Government

IREDA works with various PSUs/FIs in the development of the RE sector in the country by way of :

- Organizing the business meets/conferences etc.
- Sharing views/expertise through training programmes
- Co-financing projects etc., wherever possible.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/ 2003-P&C, dated 19.11 2003]

Recommendation (Sl. No. 9, Para No. 2.50)

The Committee feel constrained to note that there has been a mis-match between the targets and achievements of Solar Power Programme since the year 2000-2001 in spite of the Committee's cautioning the Ministry to project only achievable targets. During the year 2000-2001, Rs. 7.75 crore was allocated for SPV Power Programme at the Budget Estimate (BE) stage which was reduced to Rs. 3.25 crore at Revised Estimate (RE) stage but the actual amount spent during the year was further reduced to Rs. 2.35 crore. During the year 2001-2002, the amount was increased from Rs. 6.00 crore to Rs. 10.00 crore but the actual expenditure had surpassed even this too and it was Rs. 10.40 crore. This shows that the Ministry have failed to estimate their financial requirement even at the stage of Revised Estimate. What is more irrational is that the physical targets were over achieved even during the year 2000-2001 through the budget were reduced from Rs. 7.75 crore to Rs. 3.25 crore and the actual amount spent was further dipped to

Rs. 2.35 crore. Furthermore, Rs. 6.00 crore has been allocated during the year 2003-2004 against Rs. 8.00 crore (RE) during the year 2002-2003 through the physical targets for both the years is 750 kW and the Ministry have assured the Committee that the reduced amount of Rs. 6.00 crore allocated for the year 2003-2004 would be required for new projects to be taken during the year. But the Committee that not convinced with this argument as it has been informed to the Committee that no additional or new schemes have been proposed under the Solar Power Programme for the year 2003-2004. Estimates based on such fallacies is bound to fail certainly. It is further informed to the Committee that the allocations made under the Solar Thermal Power Programme during the year 2000-2001 and 2001-2002 pertained to the 140 MW ISCC Mathania Solar Power Project could not be utilized on account of delay in completion of preparatory activities and placing of contract by the Rajasthan Renewable Energy Corporation Ltd. (RRECL). Taking into consideration of the above-mentioned facts, the Committee are of the firm opinion that the reasons attributed for mis-matches in targets and achievements relating to Solar Power Programme are not beyond the control of the Ministry of Non-Conventional Energy Sources (MNES). The Committee desire that there is a need to overhaul the entire system of the budgetary mechanism in the Ministry and, therefore, recommend that Government should take appropriate action in this regard and inform the Committee accordingly.

Reply of the Government

Year-wise B.E., R.E., actual expenditure and physical targets and achievements for Solar Photovoltaic Power Programme during 2000-2001, 2001-02 and 2002-03 are as follows :—

(Rs. in cror e)

Year	B.E.	R.E.	Actuals	Physical Target (kW)	Physical Achievements (kW)
2000-01	7.75	3.25	3.75	300	375
2001-02	6.00	10.00	10.15	300	375
2002-03	8.00	8.00	7.56	750	500

- During 2000-01, an amount of Rs. 3.75 crore was released for ongoing and new grid interactive SPV power projects. Three projects aggregating to 375 kW capacity were commissioned in Andhra Pradesh (175 kW), Lakshadweep (100 kW) and Uttal Pradesh (100kW).

- During 2001-02, an amount of Rs. 10.15 crore was released for ongoing and new projects sanctioned during the year. Six projects aggregating to 375 kW capacity were commissioned in Andhra Pradesh (1×100 kW), Lakshadweep (2×100 kW), Rajasthan (2×25 kW) and West Bengal (1×25 kW).
- During 2002-03, an amount of Rs. 756 crore was released for new projects in Chandigarh, Haryana, Pondicherry, Rajasthan, Uttaranchal and Uttar Pradesh, and for ongoing projects in Andaman & Nicobar Islands, Lakshadweep and Punjab.
- During 2003-04, it is expected that Rs. 6.00 crore will be released on ongoing projects that are likely to be completed in Andaman & Nicobar Islands, Chandigarh, Haryana, Lakshadweep, Pondicherry, Punjab, Rajasthan, Uttaranchal and Uttar Pradesh. The projects in Lakshadweep got delayed for want of environmental clearance in Coastal Regulatory Zone-IV. The work could commence on the projects only towards the end of the last Financial Year. They will be commissioned by the end of 2003-04, and funds will have to be released for these projects.
- The solar thermal power project at Mathania in Rajasthan was originally approved for implementation using naphtha as the fuel. However as prices of naphtha registered a sharp increase in 2000-01 the project authorities rightly decided to change the fuel to natural gas. The project configuration was thus changed and the technical specification had to be modified before inviting bids for pre-qualification and execution. In spite of extension of time given by the implementing agency (RRECL), no bids were received from the qualified parties. The RRECL have had to again hold consultations with the financing body KFW and the Principal Project Consultant on the further course of action. RRECL is now likely to give a further extension of time with slightly modified terms of bidding. The bids are now likely to be received before the end of 2003-04 and the order placed thereafter. All these developments are beyond the control of MNES.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/2003-P&C, dated 19.11 2003]

Recommendation (Sl. No. 11, Para No. 2.52)

The Committee are constrained to note that no Solar Thermal Power Project has so far been established in the country. The first project of 140 MW Integrated Solar Combined Cycle Power Project which includes a 35 MW thermal component using solar energy and a combined plant of 105 MW capacity based on Naphtha, which is now planned to be changed to regasified liquefied natural gas, is planned for implementation at Mathania in Rajasthan. The Committee find that this too has landed in deep trouble. Funds were surrendered during 2001-2002 and 2002-2003 as Rajasthan Renewable Energy Corporation Ltd. (RRCL) could not finalize the turnkey contract for the project. Rs. 112.00 crore earmarked for the project has been surrendered. The Committee also found that the Ministry failed to properly analyze the utility of fuel like Naphtha which is being discarded world over. Moreover, it is characterized by high volatility and sharp price fluctuation in international market. Now, it has been decided to change from Naphtha to gas for the conventional component of the project. The Committee hope that the project will be completed during 10th Five Year Plan. The Committee desire that the feasibility studies for the projects based on the same technology configuration should be carried out in the light of the experience gained/to be gained in this project and such project should be established in various other parts of the country.

Reply of the Government

Work order for the 140 MW Intergatd Solar Combined Cycle Power Project at Mathania, Jodhpur, is likely to be placed by March, 2004. The project is expected to be completed within 36 months, *i.e.*, within the 10th Plan itself. As suggested by the Committee, the Ministry will take up feasibility studies for replication of such projects once the techno-economic feasibility of these projects is established, in the light of experience gained in operating the Mathania project.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/2003-P&C, dated 19.11 2003]

CHAPTER IV

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

Recommendation (Sl. No. 2, Para No. 2.23)

The Committee note that the average cost of acquisition of funds by IREDA during 2002-2003, was 9.55%, against average lending rate of 11.99% giving a margin of 2.44%. As per assessment made by IREDA, the average lending rate during 2003-2004 is expected to come down by 67 basic points to 11.32% and the average borrowing rate 86 basic points to 8.69%, giving a margin of 2.63%. The Committee find that in such an event, the margin of earning is going to increase from 2.44% to 2.63%. The Committee have observed that in spite of being a developmental agency, the lending rates of IREDA is more than commerial financial institutions, which charges anything betwen 9% to 9.5% as against IREDA's lending rate of 11.32%. Even REC lend at 9.2%. As a result, an entrepreneur is tempted to approach commercial FIs for obtaining loans rather than to IREDA. This raises a question of very existence of developmental agency like IREDA which is totally decidated to the cause of renewable energy. The Committee, therefore, feel that the difference between the cost of acquisition and lending of funds should not in anyway exceed 2%. The Committee are of the view that IREDA has now become a commercial financial institution, rather than a development promoting agency. The Committee view this seriously and recommend that ways and means should be found out to correct this imbalance, lest the goal to source 10% power by 2012 will remain a distant dream. It is in this context, the Committee recommend that the government should reduce the rate of interest through mobilization of low cost funds like equity, Tax Free Bonds, Infrastructure and Capital Gains Bonds, etc.

Reply of the Government

During 2002-03, Rs. 35.00 crore towards equity was released to IREDA apart from it raising Tax Free Bonds of Rs. 50.00 crore at an interest rate of 6% per annum. During 2003-04, the subsidy amount has been increased to Rs. 40 crore and IREDA has once again raised Rs. 50 crore through Tax Free Bonds at an interest rate of 5.5% per annum. Further, Rs. 50.00 crore was planned to be raised through Infrastructure Bonds but as the credit rating of IREDA is low, it was unable to goahead with its plans.

Steps are being taken by IREDA to lower its cost of borrowing by pre-paying high rate foreign loans from funds borrowed from the domestic market.

IREDA's competitiveness is not at stake as it still remains one of the major players in the field of financing renewable energy projects, systems and devices. One problem IREDA faces is from a low level of recovery which could eventually impact its rate of lending by way of increased margins. However, all recovery steps are being taken to ensure that IREDA takes its job of recovery very seriously.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/ 2003-P&C, dated 19.11 2003]

Comments of the Committee

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

Recommendation (Sl. No. 3, Para No. 2.24)

The Committee also recommend that the present equity base of IREDA which is Rs. 35 crore is too meagre and the proposal of Government to infuse additional Rs. 5 crore as equity, may not help to tide over the situation. Considering that some of PSUs like HUDCO is having a large equity base of as much as Rs. 1000 crore, there is no justification of pegging it as Rs. 40 crore for IREDA, especially when renewable sources have to be promoted. The committee, therefore, recommend that equity of IREDA should be increased to at least Rs. 300 crore within three years and bonds issued by IREDA be specified as long term assets. At the same time, the Committee recommend that IREDA should not only reduce their non-performing assets but also improve their recovery rate.

Reply of the Government

The equity base of IREDA at the end of 9th Plan was Rs. 250.35 crore. An amount of Rs. 250.00 crore has been allocated towards equity of IREDA for the 10th Plan period. An amount of Rs. 35.00 crore was released during 2002-03 and Rs. 40.00 crore is being released during 2003-04. The Ministry has noted the recommendation of the Committee and has asked IREDA to reduce its non-performing assets by improving the recovery rate. The equity base of IREDA is being increased keeping in view its plans and programmes and targets mutually agreed upon in the MoU. IREDA is making all efforts to borrow from the domestic market at lower rates of interests instead of depending upon expensive foreign loans in the past so that it can lower its cost of borrowing. At present,

IREDA is making efforts to borrow long-term funds from the LIC and banks. In this regard, IREDA will take professional legal help in a bigger way to put extreme pressure on the errant borrowers.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/ 2003-P&C, dated 19.11 2003]

Comments of the Committee

(Please *see* paragraph No. 14 of Chapter I of the Report)

CHAPTER V

RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH FINAL REPLY OF THE GOVERNMENT IS STILL AWAITED

Recommendation (Sl. No. 17, Para No. 2.81)

The Committee appreciate the role performed by West Bengal Renewable Energy Development Agency (WBREDA) in ensuring the electricity to the far-flung areas like Sunderbans through non-conventional energy systems. Considering the backwardness and remoteness of Sunderbans area, the Committee desire that all the non-conventional sources projects should be provided 90% grant and 10% loan and also desire that Sunderbans type of experiment should be replicated throughout the country. The Committee note that in spite of this Committee's earlier recommendation to clear the Durgadauni Tidal Project (3.0 MW) at Sunderbans in West Bengal, it is still pending with the Government. The committee desire that the project should be cleared without any further delay. The Committee also recommend that the project should be provided with cent-per-cent grant by the Union Government.

Reply of the Government

A decision has already been taken to provide 90% subsidy to all island regions apart from special category States, which also get that level of subsidy. Regarding Durgadauni Tidal Project, an environment impact assessment sutdy is being made by the West Bengal Renewable Development Agency, Calcutta. The study is expected to be completed by March 2004. The clearance of the project would depend upon the outcome of this study as also the clearance of the Ministry of Environment and Forests from the environmental angle.

[Ministry of Non-Conventional Energy Sources O.M. No. 8/1/ 2003-P&C, dated 19.11 2003]

NEW DELHI;
February 3, 2004
Magha 14, 1925 *(Saka)*

SONTOSH MOHAN DEV,
Chairman,
Standing Committee on Energy.

ANNEXURE I

MINUTES OF THE SECOND SITTING OF THE STANDING COMMITTEE ON ENERGY (2004) HELD ON 29TH JANUARY, 2004 IN COMMITTEE ROOM 'D' PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 15.00 hrs. to 15.45 hrs.

PRESENT

Shri Basudeb Acharia — *In the Chair*

MEMBERS

2. Shri Bikash Chowdhury
3. Shri Ali Mohmad Naik
4. Shri Dalpat Singh Parste
5. Shri Amar Roy Pradhan
6. Shri Chandra Pratap Singh
7. Shri Tilakdhari Prasad Singh
8. Prof. Rita Verma
9. Shri Bimal Jalan
10. Dr. K. Kasturirangan
11. Shri Ajay Maroo
12. Shri B.J. Panda
13. Shri Matilal Sarkar
14. Shri Gaya Singh
15. Shri Veer Singh

SECRETARIAT

1. Shri P.K. Bhandari — *Director*
2. Shri R.S. Kambo — *Deputy Secretary*
3. Shri R.K. Bajaj — *Under Secretary*

2. In the absence of Chairman, the Committee chose, Shri Basudeb Acharia, M.P. to act as Chairman under Rule 258(3) of the Rules of Procedure and Conduct of Business in Lok Sabha.

3. Thereafter, the Acting Chairman, Standing Committee on Energy welcomed the Members to the sitting of the Committee.

4. The Committee then took up for consideration the following draft Reports: –

(i) Action Taken Report on the recommendations contained in the 38th Report (13th Lok Sabha) on Demands for Grants (2003-04) of the Department of Atomic Energy.

(ii) Action Taken Report on the recommendations contained in the 39th Report (13th Lok Sabha) on Demands for Grants (2003-04) of the Ministry of Non-Conventional Energy Sources.

(iii) Action Taken Report on the recommendations contained in the 40th Report (13th Lok Sabha) on Demands for Grants (2003-04) of the Ministry of Power.

(iv) Action Taken Report on the recommendations contained in the 41st Report (13th Lok Sabha) on Demands for Grants (2003-04) of the Ministry of Coal.

(v) Original Report on the subject "Safety in Coal Mines".

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

6. The Committee also authorised the Chairman to finalise the above-mentioned Reports after making consequential changes arising out of factual verification by the concerned Ministries/Department and to present the same to both the Houses of Parliament/Hon'ble Speaker, Lok Sabha.

The Committee then adjourned.

ANNEXURE II

(*Vide* Para 4 of Introduction)

ANALYSIS OF ACTION TAKEN BY THE GOVERNMENT ON THE RECOMMENDATIONS CONTAINED IN THE THIRTY-NINTH REPORT OF THE STANDING COMMITTEE ON ENERGY

I.	Total No. of Recommendations	17
II.	Recommendations that have been accepted by the Government (*Vide* Recommendations at Sl. Nos. 1,5,6,7,10,12,13, 14,15 and 16)	10
	Percentage of Total	58.82%
III.	Recommendations which the Committee do not desire to pursue in view of Government's Replies (*Vide* Recommendations at Sl. Nos. 4,8,9 and 11)	4
	Percentage of Total	23.52%
IV.	Recommendations in respect of which replies of the Government have not been accepted by the Committee (*Vide* Recommendations at Sl. Nos. 2 and 3)	2
	Percentage of Total	11.77%
V.	Recommendations in respect of which final replies of the Government are still awaited (*Vide* Recommendation at Sl. No. 17)	1
	Percentage of Total	5.89%