



Environmental agenda for CERC

Introduction

The energy markets have been successively restructured to allow greater participation of market forces. With electricity privatization and restructuring, wrapping up the list of energy sector, there are strong indications that the likely next domain for restructuring is environmental regulation (Deny Ellurman, 1999). Emission trading, under the US Acid Rain Programme is an indication that markets in environmental goods can be constructed and explicit recognition of property rights in the use of environment is compatible with effective and non-intrusive environmental regulation^a. Thus, the focus of the future has been clearly defined in recent literature as 'environment'. And for the Central Electricity Regulatory Commission the mandate under Section 13 (f) of Regulatory Commissions Act 1998, requires it to "associate" with the environmental regulatory agencies to develop appropriate policies and procedures for environmental regulation of the power sector. Hence, it is necessary that the CERC define its role in this context. The objective of this chapter is to define an agenda for the Commission such that, all stakeholders in the market are indicated their intention.

This above mandate has to be read along with the other functions of the CERC spelt out in Section 13. Among these functions are the regulation of tariff of generating companies owned or controlled by the Central Government and the function of aiding and advising the Central Government in the formulation of tariff policies. On reading these various functions together, it is clear that the CERC is in a position to address some of the environmental issues raised in the earlier chapters. In the following sections an attempt has been made to chart out certain specific actions that the CERC can take on these issues.

^a Deny Ellurman, "The next restructuring: Environmental Regulation", *The Energy Journal*, Vol. 20, No.1, 1999 Pg. 141.

Environmental agenda

Association with environmental agencies

From a direct reading of Section 13 it is desirable for the Commission to adopt a proactive role by taking the initiative to establish a regular dialogue with the environmental agencies. The level and frequency of interaction are not being suggested here. However, CERC should insist that it should be consulted on any proposed change in environmental standards and procedures. The principal objective here should be for CERC to examine whether the policies and guidelines being framed are consistent with the development of the power sector. Specifically, the cost implications of changes in environmental policies should receive careful attention, since these would come back to the CERC while approving tariff. For this purpose, CERC should establish contact with the MoEF , GOI and the CPCB. The association of CERC with these agencies will help in bringing balance to the process of change in environmental standards since the viewpoint of the industry and the electricity consumers can be effectively projected by the CERC.

Use of tariff determination function

Under Section 13(a) the CERC has the power to determine the tariff of all generating companies owned or controlled by the Central Government. The tariff includes components of cost, which have been incurred to meet the environmental standards. It would also include cost elements relating to R&R measures. One of the issues, brought out in earlier chapters, is the poor compliance with environmental standards. The present instruments for enforcing these standards have limited effectiveness. The CERC can play a role in using its tariff determination powers, to reinforce the other statutory provisions.

The present system requires power plants to submit environmental audit reports to the environmental agencies. These reports are developed by agencies appointed by the plant's management themselves. This provides an in built bias into the system with the possibility of incorrect results being reported. Moreover, penal provisions are not effective. At times, cost of compliance is higher than the cost of penalty, thereby providing unintended incentive in continuing non-compliance.

As the CERC has to approve the total tariff, including those cost elements incurred to meet environmental standards, it can insist upon satisfaction that the environmental standards have indeed been met before permitting any pass through of such costs. For this purpose the CERC should develop a list of qualified

agencies/experts who would periodically report on the compliance of a particular plant with the environmental standards laid down for that plant. A similar process can be established for those elements of cost and agreements relating to R&R.

In case there is deviation from the standards laid down, the CERC can disallow the costs associated with the equipment or other costs incurred to meet the specified standards.

CERC can take the help of MoEF/CPCB in establishing this list of approved agencies/experts and also in allocating the different plants among them. To avoid any form of bias, the plants can be rotated on an ad-hoc basis among the agencies short-listed.

Even where the agency nominated by CERC does give a report that all the standards are met, wide publicity should be given in the local area to the findings of the agency. This would help to create public awareness of the standards which the plant is expected to maintain and the reported level of compliance. This would also be required under Section 37 of the Regulatory Commissions Act, which requires the Commission to ensure transparency while exercising its powers and discharging its functions. The Commission, along with the environmental authorities, might, at some future point, publish the enforcement statistics on an annual basis.

Apart from the above, the CERC can promote improved environment compliance by building into the system of competitive bidding, incentives for better environmental compliance. In the present system, where central generating companies invite bids for equipment, there is only a certain minimum standard, which all bidders have to meet. No advantage is given to those who use better technology and are able to report better environmental compliance than the specified minimum. It would be desirable to introduce, in the bidding process itself, a system that rewards such higher compliance. In future, when the Commission formulates guidelines for competitive bidding for private sector plants or for purchase of power itself, a similar approach could be followed. This would however, require evolving a methodology for quantifying the benefits from environmental compliance, which is not an easy task and would require considerable effort and research.

Resolution of outstanding issues

Under Section 13 (f) the CERC has to associate with the environmental regulatory agency. There are certain issues, which are in the domain of the environmental agencies. The CERC can take the initiative to resolve these issues so that there is a greater clarity and transparency in these areas. These are listed below.

1. The MoEF has not prescribed any specific EIA guidelines for power transmission and distribution projects. Since power transmission projects may have some unavoidable environmental and social implications, there is a need for specific guidelines for the same. The CERC can make recommendations to the MoEF for the preparation of the same.
2. In India, at present, there are no standards prescribed by MoEF and CPCB for diesel power plants. However, MoEF has proposed norms in draft form for diesel power plants with capacity equal or more than 35 MW. In view of the growing power shortage in different regions in India, diesel power plants of different capacities are expected to come up. There is a need to develop and notify environmental norms for various capacities of diesel power plants. The CERC can make recommendations to the MoEF for the preparation of the same.
3. At present, power plants beyond 1000 km from the coal field, as also those in certain urban areas/ecologically sensitive areas have to utilize coal with less than 34 per cent ash content. In effect, this means that washeries have to be set up to ensure that these power plants can use coal of the designated quality. Here, there is an ambiguity in the responsibility of the coal producer and the electricity producer. There is no agreement as to who has the responsibility to implement this notification. Both have their own difficulties in establishing these washeries. The electricity producers have argued that as the washery necessarily needs to be set up near the coalfield, from the point of view of administrative issues and logistics, it makes sense for the coalfield to establish a washery and charge a premium for washed coal. Coal producers have, however, argued that, given their financial position, they are not capable of establishing these washeries; further their past experience in this area has not been a happy one as the expected offtake did not materialize. The Commission can take up this issue with the relevant agencies to sort out the same. Apart from the environmental aspects, washing can also reduce the cost of electricity production both by way of reduction in transport costs and efficiency gains in the plant.

The Commission would need to take up this issue with the Ministry of Power, Coal and MoEF. The MoEF should be persuaded to clearly state as to whether the primary responsibility for getting the coal washed is that of the coal mine or of the power plant. There should also be a re-assessment

of the 1000-km distance limit. It may be cost effective to have a lower distance limit. Thus, MOEF may be asked to have this limit looked at again.

Aid and advice

Section 13 (e) gives the Commission the function of aiding and advising the Central Government in the formulation of tariff policy. One of the issues on which the Commission can give advice to the Ministry of Power, is regarding the need to promote purchase of energy from renewable sources. In order to give these alternative technologies a much-needed fillip, it would be necessary for each State to specify a certain percentage of its requirements that would be bought from renewable sources. This percentage would vary from State to State, depending on the potential for such technologies in individual states. CERC should develop a paper, in consultation with the SERCs, wherever established. This paper should examine the modalities for implementing the above suggestions. One of the methods of doing this is to go in for competitive bidding for purchase of energy from renewable sources. This would ensure transparency as well as competitiveness within this group.

After consultation with the SERCs, CERC could advise the Ministry of Power to formulate a national policy for encouragement of renewable based technologies. Since renewable technologies come within the purview of MNES, the Ministry of Power would no doubt have to consult MNES before finalizing this policy.

Conclusion

Resources available with the CERC are limited. It may not be possible for the CERC to take up all the agenda points suggested above. Further it would not be desirable to also take up a large agenda which cannot effectively be pursued. It is, therefore, suggested that if due to lack of resources only a limited agenda is to be pursued then the proposals addressed under 'association with environmental agencies' and 'use of tariff determination function' (except the proposal in the last section of the para which also may be taken up later) may be pursued initially and the others taken up later.