

# Role of the C.E.A. in National Power Planning

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**T**HE PAPER BY A S JOSHI "Wanted a Strong, Efficient and Positive CEA" brings out certain aspects of the organization and the activities of the CEA which are of crucial importance. Shri Joshi has done an admirable job in identifying the issues which are highly relevant for the power situation in the country. I take this opportunity to respond on some of the issues raised by Joshi.

## National Power Plan

The CEA has the major role in co-ordinating the activities of the State and the Central power agencies and in the preparation of long-term and short-term power plans for consideration of their inclusion in the Five Year Plans. Joshi argues that since generally gestation period for power plants extends beyond 5 years, if necessary, power schemes can even be taken out of the plan framework. This would not be advisable because investment for power capacity has to bear some relationship to the investment on the supporting sectors providing inputs to the power supply industry and those necessary for building of infra-structure.

It is a fact, however, that CEA failed to impress upon the Planning Commission the order of priority which should have been accorded to the power sector in the Five Year Plans. The CEA draws up load forecast for the State after careful examination in the Annual Power Surveys. Notwithstanding the criticism of the States about the figures finally accepted in the Annual Power Survey, the CEA does not press for the demand for matching

investment on the installed capacity for the States that follow from the figures in the Survey. The CEA has no tradition of drawing up any Perspective Plan for the guidance of the States and the Planning Commission. A relieving feature in the situation is the preparation of a National Power Plan by the CEA, a draft of which is being circulated for discussion.

## National and Regional Grid :

The CEA is the only agency capable of integrating the networks over the States and the regions. The idea of a national grid with the power system was envisaged earlier in two stages. It was thought that the regional grid comprising of groups of States will be developed in the first instance and the regional grids would be gradually integrated into a national grid in the second stage. But the regional grids are not adequately developed yet. The crucial element with the regional grids is the inter-State links which remain neglected in most of the States. The gaps in the inter-State grids has thwarted the development of regional and national grid to a large extent. The factors inhibiting the development of inter-State link are perhaps more economic than technical. The CEA has not been able to evolve an acceptable form for the pricing of power for exchange between the States yet. Individual SEBs are concerned with their own financial accounts and are reluctant to accept the price structure which may be detrimental to the respective Boards' interest. The result is that the inter-State tie lines, although finance by the Centre, remain on paper because of lack of enthusiasm on the part of the State Boards.

According to current thinking the power units in the Central sector, thermal and hydel, are to be inter-linked and provide a network at national level. This is going to lead to a peculiar situation where a national grid will co-exist with State grids quite unrelated to each other. In the process the regional grids will hang in limbo.

## Pattern of Development :

Joshi is concerned that CEA has not pushed forward the development of nuclear power in the country to the desired extent. Joshi seems to ignore the fact that the responsibility for development of

nuclear power rested with the Department of Atomic Energy which has been given liberal grant of fund over the Plan periods. If it did not yield the desired results CEA could hardly be blamed for it. There is also wide misconception about the effectiveness of nuclear power in Indian condition. Notwithstanding the claims made by the nuclear scientists nuclear power remains uneconomical compared to thermal power at least to a distance of about 750 KMs from the pitsheads.

## Private Versus Public Sector

Joshi has urged for permitting the re-entry of private enterprise into the power sector. The suggestion ignores the experience of the power industry in the country. It was realised after independence that the development of industries in the country could not be left to the initiative of the private entrepreneurs alone which was motivated by consideration of commercial profit. Rapid development in the industrial sector, particularly the heavy industries, called for accelerated rate of expansion of power capacity. There was no certainty that individual entrepreneurs would be able to take up the challenge. The State had to undertake massive investment in the successive Plans for forcing the pace of development of industries; investment on the power sector was an essential part of this policy. Deficiencies in the power sector which came in the surface in recent years can be ascribed to the failure of the policy makers to accord suitable priority to the power sector rather than distinction between the public and the private sector. Massive investment that is required to organise power sectors on a national scale is quite beyond the means of the private sector. In this respect CEA has been right in emphasizing the role of the public sector in the power industry.

## Import Policy

Thanks to the Five Year Plans, India has been able to establish a strong base in the heavy industry sector. It has received India from the need of importing large volume of capital goods. It has been possible for India to enter into the world market with her supply of engineering and other manufactured goods for which she was dependent on import from foreign countries so

long. The country could build up capacities for manufacturing heavy engineering goods including power policy for restriction on imports. A general revision of such a policy would not be to the interest of the country. This does not rule out the needs for import of capital equipments, including power equipments, in specific instances from time to time. Liberalization of imports in respect of technology also has serious consequences. Given the size of the domestic market a liberal policy for import of alternative technologies for the same product would lead to installation of capacities which would remain underutilized and hence uneconomic. Import of technology cannot but be on a selective basis.

#### **Tariff :**

CEA has not been able to evolve any rational tariff policy which can be adopted by the SEBs in the country. Power being a homogeneous commodity and interchangeable between the States over long distance, there should be a uniform policy in formulating the rate structure in the different States. This need not imply uniform rate structure for all the States but the variation in the rate structure for the different SEBs should be in accord with commonly accepted principle. This is yet to be worked out.

The tariff rates for industries require to be reviewed in the context of growing demands from industrial sector. With the addition of new capacities there is emergent need for differential pricing of electricity according to hours of the day and night to meet the problem of night load.

#### **Rural Electrification :**

CEA has failed to guide rural electrification in the right direction. Priority in rural electrification should be given to energisation of pump-sets and cottage and small industries instead of mouza electrification as at present.

#### **Conservation of Energy :**

It is apprehended that the power stations in the country will remain critical for several more years while the demand for power has been

increasing faster than its supply. Given this condition planned load restriction as suggested by Joshi should have been given due consideration. Industry should be encouraged to adopt energy efficient methods in production. As the system is incapable of providing supply freely to any consumer, drawal of electricity by them should be regulated by setting upper limits after careful consideration. Experience shows that guided load restriction system is more conducive to the production system in the country than irregular load shedding, low frequency and low voltage operation which is commonly resorted to by the power industry now. CEA has failed to provide guidance to the SEBs in this matter.

#### **Alternative Energy Sources :**

Joshi has rightly referred to lukewarm attitude taken by the CEA towards alternative sources of energy. Exploitation of alternative energy sources has to be on a decentralized basis. SEBs are reluctant to enter in the field because of rigidity in their infra-structure which is not amenable to decentralised operation. Even if SEBs can be persuaded to accept responsibilities of operation of such units, planning and feasibility study for such projects have to be taken up by a different agency. The present set up of SEBs are inadequate for it. CEA has to take an overview of the problem and arrive at a reasonable solution. The sources of funding of such projects still remain unclear.

#### **Coal Supply :**

Joshi is right in pointing out the weakness in the link between the CEA and Coal India in respect of planning for development of new coal mines and coal washeries. Since the CEA is not yet armed with a long-term perspective plan, Coal India has been drawing up its programme for development of mines on the basis of their limited understanding of the demands. Failure of CEA to project the long-term requirements of coal mines in different regions of the country is going to cost heavily for any planning of expansion of power capacity in the future. □

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ed to mere technical clerks.

#### **Conclusion :**

Under the circumstances, any body can understand, how an organisation can function at all, what to talk of effective functioning when it is helpless and the cadre serving it is a demoralised and shattered lot. On top of it, in the name of non-effective functioning, Corporations/Societies are being formed, carved out from the functions already being carried out by CEA, thus reducing it further to a non-entity. Formation of REC, WAPCO, NTPC, NHPC are such examples. Even the functions, assigned to CEA by statute such as promotion of research and advancing the skill of the personnel in generation and supply of electricity have been taken out forming, in violation of the act, the autonomous societies such as CPRI and PETS respectively.

The multiplicity of organisations without any effective organisation to control, supervise and coordinate their activity has created confusion and chaos. There is still time to take remedial measures to revamp CEA. It should be made independent of bureaucratic control after delinking it from the Ministry of Energy with enhanced financial and other powers needed for effective control of the Power Industry. All the Corporations Societies should function under the control of CEA rather than the Department of Power. The interest of the cadre must be safeguarded so that their calibre and competency do not go waste. □

### **Govil Model on National Set-up for Power Supply Industry**

The paper of Shri K K Govil presented at March 9 seminar will appear in next issue-due to delay in preparation of Graphics etc