

A critique on Planning Commission document on Integrated Energy Policy: executive summary

Energy has become a crucial sector of the modern society, so much so that per capita availability of energy is considered as an indicator of economic prosperity. However, the social, economic and environmental impacts of demand/supply of energy are so great that only a holistic and objective consideration of all the related issues will enable the formulation of a sustainable and effective national policy. In this context an objective review of the recommendations of Integrated Energy Policy (IEP) document, as developed by Planning Commission of India, is considered essential from the society's perspective. In this critique it is noted that while there are many good recommendations in IEP, an objective review will indicate that IEP has projected huge growth (about 5 times from the present level) in the installed/ production capacity of various conventional energy sources by 2031-32 ignoring the huge negative impacts of such a growth on our society. Unfortunately, IEP has implicitly or explicitly adapted the GNP maximizing paradigm to estimate energy demand rather than trying to estimate what is the least amount of energy needed to wipe out poverty, and how best to meet it in a sustainable manner. It is because of GNP maximizing paradigm that IEP has projected a huge annual demand growth for electricity between now and 2031-32.

Despite an enormous increase in the installed capacity since independence about 40% of our households are denied electricity, and even the other 60% are not getting quality supply. Whereas there will be unsustainable pressure on natural resources of our society associated with a huge growth projection, the long term impacts of the same on the vulnerable sections of our society including the fragile environment and bio-diversity have not even been discussed. In this context alone the IEP as a policy document has failed to meet the expectations of a welfare society. But what we need is a totally different and Indian cultural biased approach, similar to the one which was recommended by Prof. Amulya Kumar Reddy way back in mid 80s. As a national policy IEP has failed to consider the welfare of all sections of our society on a holistic/ sustainable basis.

In view of the social, economic and environmental impacts of fossil fuels, and their limited availability, the country is in urgent need of a paradigm shift in the way it views the energy sector as whole. The past policy of looking at supply side economics only should be changed to a holistic approach of minimising the total energy requirements while ensuring equitable development of all sections. The legitimate demand for energy must be objectively considered in the correct context of greater needs of the society such as clean air, water and healthy food, and the inescapable limits of the nature in supporting such a demand. In this regard it becomes obvious that the conservation and enhancement of our environment and bio-diversity must not be compromised in order to meet the unabated demand for energy. Within the energy sector, there is a critical need to: clearly differentiate our needs from wants/luxuries; recognize the fact that fossil fuels are fast running out; focus on improving the energy efficiency to international best practice levels; effectively deploy all the alternatives available to meet the legitimate demand; and harness the renewable energy sources to the optimum extent.

In view of local environmental issues and Global Warming impacts of fossil fuels, it is right time to lean towards alternate energy sources such as solar, biomass, wind and other renewable sources on a decentralized basis rather than through centralised large size units. Decentralized systems will reduce transmission and distribution losses, and would also help in reducing the unacceptable levels of urban-rural disparity prevailing in power distribution. In view of the Global Warming impacts on our densely populated society the usage of fossil fuels should be minimised in the short run and eliminated in the long run.

There is no escaping the need to recognize the limits of the nature in supporting the ever escalating demand for energy; acknowledge the fact that the energy security will not be feasible as long as we fail to effectively manage the demand, and as long as we rely heavily on external resources.

Electricity being a precious national resource, suitable tariff policies, including a feed-in-tariff for renewable energy sources, should be implemented urgently to heavily discourage its wastage, and to encourage very high efficiency in its local production and usage. Subsidized electricity supply to any category of consumers should be minimised, and if considered essential should be only through advance payment of one year's subsidy amount by a State Government to the supply company. A comprehensive policy to encourage widespread usage of public transport systems should be implemented; usage of private vehicles should not be encouraged keeping in view the huge cost of fuel imports, road infrastructure constraints, and the pollution impacts; old and inefficient vehicles should be eliminated on a rigid time scale; adequate investment in railways should be taken up on a war footing.

International best practice level efficiencies must be adopted at all stages of energy cycle by 2020; AT&C losses should be brought down below 10% in each revenue district of the country; the PLF of each coal /nuclear power project should be improved to a minimum of 90%; efficiency of end use applications, including agricultural pump sets should be comparable with the international best practices.

Costs and Benefits Analysis (CBA), from a societal perspective, should become a part of the mandatory approval process for all new power projects. Most of the newly permitted coal power plants should come up on the sites of existing old/ inefficient power plants and should be of much higher overall efficiencies and with low pollution footprints.

There shall be no supply to any consumer without accurate metering beyond 2015. 'Polluter pays principle' is a novel idea put to practice with the desired effects in many parts of the world, and it is best applied at the stage of mining and electricity generation itself. A suitably designed carbon tax should be applied to each ton of coal, litre of diesel/petrol, kilo litre of water and kWh of energy produced/ consumed/ generated so as to minimise the use of these resources for commercial purposes by 2020.

The last man on the street OR the most vulnerable sections of the society should be at the centre of our energy policy to enable adequate human development of the entire society,

instead of focusing on growth of GDP alone.

IEP's projection that the total installed power generating capacity has to increase from about 160,000 MW to about 800,000 MW by 2031-32 will mean the addition of about 25,000 MW power capacity every year which is neither acceptable to the society because of huge implications nor feasible on the basis of what has been achieved in successive five year plans. IEP seem to have failed to take into account the impracticality of its recommendations.

IEP itself has many good recommendations such as focus on efficiency improvement, Demand Side Management(DSM), correct pricing of energy, R&D on alternative energy forms, equity in energy availability to the poor, Energy Service Companies (ESCO) etc.

In view of the huge influence of electricity sector on social, economic and environmental aspects of our society, much of the focus in this critique on IEP is on electricity sector. The main objective of the critique is not to comment on every issue raised in IEP, but to highlight the serious shortcomings in IEP; the impact of wrong policies on the society and bio-diversity; and to recommend a sustainable, people friendly and environmentally friendly energy policy.

Regards

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