



REMOVING ENERGY POLICY CONTRADICTIONS

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Many recent initiatives by the Government of India portends well for the renewable sector. But the Integrated Energy Policy which is the officially approved policy, has many inherent contradictions to this recent trend. The biggest bottlenecks are the two main assumptions made by the policy. The first is that "renewables may account for only 5% to 6% of India's energy mix by 2031–32." The second problem lies in the sweeping assumption that renewables would be critical for India's energy independence beyond 2050 only! These predictions are based on an unscientific and unvalidated presumption that "coal shall remain India's most important energy source till 2031–32 and possibly beyond." The contradictions in this belief will be analysed little later. The other unvalidated presumption is that India's economy should grow at a certain percentage and hence by 2031–32 power generation capacity must increase to nearly 8,00,000 MW. 95% of this is expected to come from conventional sources!

This undue optimism about availability of fossil fuels is in complete contradiction to the refusal to see latest technology developments, near-future technology leapfrogging and cost-reduction projections for renewables. For example, the policy states that "solar thermal generation has not found acceptance globally" (pg.39, IEP). Such a statement was made at a time when globally, concentrated solar power (CSP) generation was seeing a big revival with many new projects planned in several countries. In India, there is a desert area of over 2 lakh sq.kms, where direct solar insolation suitable for CSP is available. Even if we utilise 15% of this desert land, we will be able to produce over 2,00,000 MW of power.

The IEP has an implicit methodological bias in favour of fossil fuels. Due to this systematic bias, the policy is skewed in favour of resources we do not have: oil, gas and coal. This bias was also the reason for the lack of follow-up action on the benevolent objectives listed in the IEP relating to renewables. The most glaring departure from the stated objectives is in respect of incentives to mega power projects. The policy states as one of the urgently required measures: "Removal of misplaced incentives such as those available to mega power projects is needed. While the rest of the world is recognising the higher efficiency of distributed generation facilities, India is providing incentives to mega projects. Consequently, state governments opt for mega projects that claim the incentives and then swap power among themselves to meet the guidelines of the mega power policy; thereby creating unnecessary transmission capacity and movement of power back and forth. There should be no discrimination in available incentives based

on size or type of technology or fuel used." (pg.79, IEP). But the ground reality is that ultra mega power projects continue to be favoured and incentivised all around the country. And the Planning Commission who authored the IEP has not done anything to move India away from such mega disasters to a distributed generation system. The IEP document is full of such internal contradictions.

BUNDLE OF CONTRADICTIONS

In attempting to give only 5% share of power generation to renewables by 2031–32 and a marginal role even upto 2050, the committee which formulated the IEP depicted the methodological bias in favour of fossil fuel-based generation. This bias is most evident in the projection that by 2031–32, the additional capacity from wind will be 14,000 MW (pg. 22, IEP). This is also in complete contradiction to the projections made by the 'Working Group on New and Renewable Energy' appointed by the Planning Commission for the 11th Plan, which has indicated a capacity addition of 33,000 MW from wind by 2020. By 2009, India has already crossed 10,000 MW of wind power installed capacity!

Now, it is important to analyse the internal contradictions in the IEP, in respect of some conventional sources of energy. First, about coal. The IEP document says Indian coal would be fully depleted in 45 years. Taking 2005 as the base year, this would mean that Indian coal would be available upto 2050. In all the eleven different modelled scenarios, coal remains the pre-eminent source upto 2032. The requirement of coal for power generation will increase from 406 Mt in 2004–05 to 2555 Mt in 2031–32. (pg.46, IEP). Upto 45% of this requirement would need to be imported. But no attempt has been made to correlate India's import requirements with the globally available exportable surplus of coal and the competing demands for the same. The IEP just makes a statement that "currently less than a billion tonnes of high quality coal equivalent is traded internationally out of a production of about 4.8 billion tonnes of equivalent high quality coal." No attempt has been made to find out whether we are capable of ensuring the required supply of imported coal.

THE GREAT COAL DELUSION

The IEP says that "extractable coal reserves will run out in 45 years" (pg. 34, IEP). However, the crucial factor has been missed out: what is more