

REFORMS and RENEWABLES

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Reform of the power sector is a double-edged sword, as far as renewable power is concerned. On the one hand, it has the potential to stimulate increased deployment of renewable energy. On the other hand, when short-term economic and technical efficiency become the norm in a reform era, it could further entrench conventional energy technologies. Reform is a much misunderstood word. The dictionary meaning of the word generally reads as, "Bringing about improvement of imperfections, faults or errors." It is also about responding to emerging new realities like impending fossil fuel depletion, price volatility of conventional fuels, etc... Hence, reformers should seriously address the impact of reforms on renewable power generation.

The Electricity Act, 2003 which is the harbinger of reforms in India, has at least a dozen clauses dealing with renewable energy. Of these, the significant clauses are 61 (h) and 86 (e), which talk about determination of tariff for renewables and earmarking a percentage of all electricity consumed to be produced from renewables. These are enabling provisions. The Maharashtra and Karnataka Electricity Regulatory Commissions (MERC and KERC) have taken the lead in utilising these provisions to set appropriate tariffs for renewable power. The MERC has also prescribed a 'Renewable Purchase Obligation', on the basis of a petition filed by the Maharashtra Energy Development Agency under Section 86 (e) of the Act. We can only hope that others will follow suit. However, the Electricity Act, 2003 does not adequately address the need for systematically developing renewables over the next few decades to ensure our country's energy security. The recently announced new National Electricity Policy only 'parrots' the insufficient provisions of the Act. Surprisingly, the new National Environment Policy is also silent on the need for a transition to renewables. The fact that conventional electricity production is the biggest polluter has been forgotten. Many western countries have enacted separate legislations to promote renewables. India also needs such a separate Act, if renewables are not to be drowned out in the reform babble.

The introduction of Availability Based Tariffs (ABT) and wholesale/retail competition will hurt the growth of renewables, if countervailing policy interventions are not carried out by the government and regulators. Renewables are likely to play a larger role if reforms encourage distributed rather than the central station model. The government should evaluate the implications of reforms on energy technology choices. Wholesale power markets should be required to consider the environmental characteristics of competing generators and the technologies used by them. Reforms should ensure that distributed resource options can compete fully to provide electricity services. When transmission services become common carriers due to privatization of distribution, all types of generation should have equal access to transmission capacity. Transmission rate structures should not be biased against intermittent renewables like wind power. Comparable transmission pricing would help overcome barriers to intermittent or low capacity factor renewables. The criteria for determining generation dispatch priority should be based on social marginal costs i.e. fuel, variable operation and management, and external environmental costs.

The frenzy in the energy sector in India today is aimed at import of coal and natural gas and acquisition of foreign oil and gas fields. These are good as medium-term measures. If we don't believe in the sarcasm that "in the long-term, all of us are dead", we need to do long-term planning for the energy sector. And for that, the only way is to turn to sustainable energy. Energy infrastructure takes years to build and many energy production systems have only decades of useful life. Hence, the need to have a master plan for sustainable energy development. Let us redirect reform to its real meaning – that of responding to emerging new realities and making the right long – term choices. It is time to move away from import-based strategies and get serious about renewables.

