

Enough Wind in its Kitty

Introduction

The third largest State by area and second largest by population in the country, Maharashtra's wind power potential is 4584 MW. In 2007-08, Maharashtra saw an addition of 268 MW to its wind energy generation capacity. Besides, the State stands second to Tamil Nadu in terms of installed capacity to generate wind energy.

The State government has so far recognised 28 potential sites for harnessing wind power with the help of the Centre for Wind Energy Technology (C-WET), Chennai, while wind speed monitoring is in progress at 81 sites. Some of the potential wind sites in the State, as declared by MNRE, are in Satara, Dhule, Nashik, Ahmadnagar, Sindhudurga and Sangli districts. Maharashtra also has the distinction of installing Asia's largest wind park in Dhule district.

Development in the wind energy sector in the State occurred during two distinct phases (See figure 1) - one from 1998-99 to 2001-02 and then from 2005-06 to 2007-08. In the first phase development process was driven by the State policy of providing sales tax deferral for investments in wind power. However, with the expiry of the policy in 2000, the annual wind power installations plummeted.

It was the tariff order of November 2003, issued by the State regulatory commission, which brought a new lease of life to the sector and wind power projects kick-started the

second phase of growth. The State regulatory commission also issued an order specifying a minimum quantity of energy to be purchased from renewables as a percentage of total power consumption.

However, there was once again a significant drop in wind power capacity addition in 2007-08 despite strong regulatory support. The reason for the decline was at the implementation level, particularly, infrastructure-related issue of land acquisition.

Regulatory Regime

To promote green energy generation in the State the Maharashtra Electricity Regulatory Commission (MERC) issued an order called Renewable Portfolio Standards (RPS) on 16.08.2006. This RPS mechanism accelerated pace of investment in green energy in the State. Through this order, MERC made it mandatory to procure energy from renewable sources in percentage of total consumption of energy to distribution licensees, open access and captive consumers (the year-wise percentage is given in Table 1).

MERC has continued with the earlier rate of purchase of electricity generated from wind power projects till 31st March 2010 at Rs. 3.50 per unit, and escalation of Rs. 0.15 per unit a year for 13 years, which is very encouraging for an investor. Through a recent order MERC has come out with an interim tariff rate of Rs. 2.52/unit for Group II projects whose PPAs have

expired. This rate shall prevail till the commission comes out with a new tariff regime.

Some of the incentives announced by the government of Maharashtra under the New Non-Conventional Energy Policy on 14 October, 2008 include continuation of the Green Energy Fund, originally included in the wind policy of 2004, for development of infrastructure facility required for non-conventional energy sources. Under the green energy fund, the government proposes to make evacuation arrangement of wind energy projects and give 50 per cent amount as subsidy; construct approach roads: 100 per cent expenditure for construction of approach roads for wind energy projects; and encourage the co-operative sector by providing as grant 11 per cent share capital for setting up wind power projects.

Nodal Agency

The Maharashtra Energy Development Agency (MEDA) was set up in 1980s with the aim to develop renewable energy and work towards energy conservation in the state. The agency has been responsible for an enabling conducive policy framework that has evoked positive response from entrepreneurs and investors to set up commercial wind power projects. The broad objectives of the corporation are:

- Promote, develop and implement non-conventional, renewable and alternate energy devices and technologies.
- Take concrete steps for conventional energy conservation

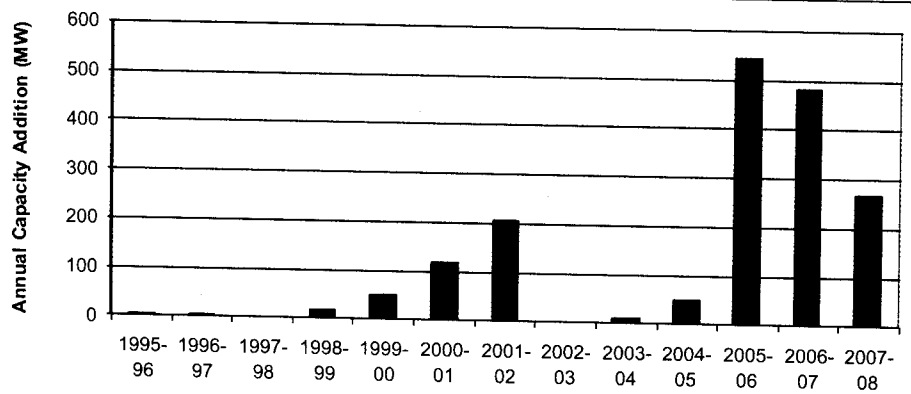


Figure 1: Wind power development in Maharashtra (Source: MNRE)

Year	Percentage
2006-07	3.0
2007-08	4.0
2008-09	5.0
2009-10	6.0

Table 1: Yearly percentage growth

measures in industries, commercial establishments and domestic sectors.

- Assist the Government of India and Government of Maharashtra in renewable energy programme implementation.
- Evolve suitable alternatives to meet the burgeoning energy demand.
- Install demonstration power projects with own investment to instil confidence in new entrants and private investors.
- Pursue power projects based on renewable energy with large-scale private investments in commercially viable projects by creating suitable policy environment.
- Information dissemination and public awareness through training programmes, publications, exhibitions, seminars and conferences.
- Support large-scale distribution and marketing of stand-alone renewable energy devices by participating in field viability and commercialisation exercises through innovative financing mechanism and creating investment opportunities.

State Outlook for Wind Projects

Investor-friendly policies of the Government of Maharashtra and technical viability of demonstration projects have attracted private investment of more than Rs 8900 crore in the wind sector so far. Nearly 1780 MW of private wind power projects have been installed in the State up to June 2008. Wind power projects fed 7,250 million units of electricity in the State grid till March 2008.

MEDA and the State government are working closely to increase the installation and usage of wind energy. The State plans to add 2,668 MW during the Eleventh Five-Year Plan (2007-12). If this target is achieved, the total wind energy generation capacity of Maharashtra will double in compari-

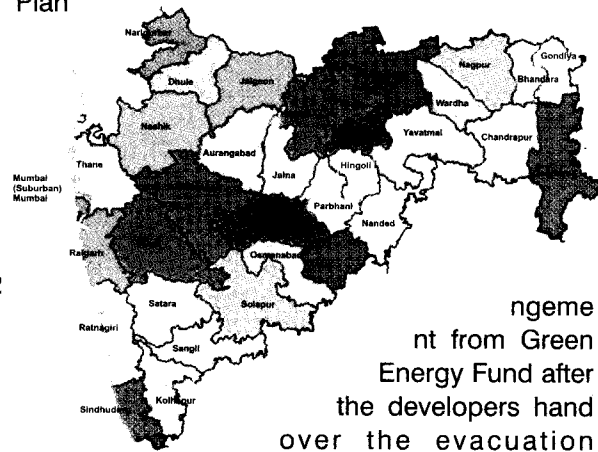
son to the Tenth Five-Year Plan figures.

Some of the major projects in the State include the 40 MW BP wind energy plant in the Dhule district. The project, completed by Suzlon Energy Limited, involved the installation of 32 turbines of 1.25 MW each.

Current Issues/Development

The government of Maharashtra issued a new Non-Conventional Energy Policy 2008 on 14 October, 2008. Under the new policy, the State has set a capacity addition target of 3,500 MW from renewables; This comprises 2000 MW capacity addition from wind.

- The government has modified some of the provisions in its previous policy. The key features of the new policy related to wind energy are as follows:
- The non-conventional projects installed under this policy shall be required to sell or sale 50 per cent of the electricity generated from the project to the Maharashtra State Distribution Company Limited (MSEDCL) under long-term contract at a tariff fixed by MERC.
- MSEDCL/MSETCL and MEDA will conduct a joint survey for the installation of HV and EHV substations and associated transmission and distribution lines required for the project. The private developers shall undertake the work of erecting HV & EHV sub-stations, and necessary EHV transmission and distribution lines on the basis of the technical information generated from the survey and under supervision of MSEDCL / MSETCL.
- MEDA will reimburse the 50 per cent of expenses incurred by private developers for erecting and commissioning of evacuation arra-



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nt from Green
Energy Fund after
the developers hand
over the evacuation
arrangement to
MSEDCL/MSETCL.

- No electricity duty shall be levied for the first 10 years from the date of commissioning of the projects if the electricity generated from the wind energy projects is used by industries for captive consumption. Electricity duty shall be applicable for third party sale.
- Wind energy developer would be required to seek a "No Objection Certificate" from the Geological and Earth Science Department for setting up the wind farm project only for the sites so notified by the Department. For all other sites no NOC shall be necessary.
- The entry fee and octroi levied on all wind electricity generators / equipment shall be refunded by MEDA from the Green Energy Fund.
- Government land on the basis of availability can be provided on long-term lease of 30 years at market price.

Conclusion

Interestingly, Maharashtra happens to be the only State in the country to have thought of and introduced the Green Energy Fund and it certainly deserves accolades for it. The State has introduced the fund to address evacuation issues and boost the sector. With the land acquisition issues being sorted out with the new policy amendments, the State looks on track to achieve the 11th Plan target.