Wind Power Bidding

What is the issue?

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The recent bid by the Solar Energy Corporation of India (SECI) to set up 1000 MW wind power plants saw tariffs drop to Rs 3.46 per unit. This has set a new benchmark for wind power in India, bringing the overall cost of power down in a rapidly growing economy.

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What the recent bid reveals?

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- Despite being India's first wind power project tender, SECI was oversubscribed 2.6 times.
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- Bids were concentrated in three States; with Tamil Nadu receiving the highest share of 1794 MW, followed by Gujarat with 700 MW and Karnataka with 100 MW.
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- **The tender was floated by the SECI to help non-windy States access wind power by linking them to the inter-state transmission system.**
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- Project developers will sign a 25-year PPA with the **Power Trading Corporation of India**, which, in turn, shall sign back-to-back arrangements with discoms /bulk customers of non-windy States.
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- Waiver of inter-State transmission charges and compensation for system losses till the interconnection point by allowing for construction of 5 per cent additional capacity were also provided as part of the tender.
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- Until now, wind energy in India followed the feed-in-tariff (FIT) route with tariffs for long-term PPAs with State discoms ranging from Rs 4- 6 per unit.
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What are the problems in Indian wind farms?

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- Going by the historically available PLF data of wind power plants in India and limited availability of high wind density sites, achieving such Plant Load Factors consistently for the 25-year life of the plant seems far-fetched.
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- Unlike solar energy, wind farms in India are concentrated in a few high wind States such as Tamil Nadu, Maharashtra, Karnataka, Andhra Pradesh, Gujarat and Rajasthan.
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- Even within these States, only selective sites offer high wind energy potential.
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Where do India’s markets heads to?

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- The Indian market is moving towards adopting higher **capacity wind energy generators (WTGs)** with hub height of more than 100 metres.
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- Global players such as GE have come out with advanced technology turbines designed to offer increased swept area, facilitating higher generation in low wind density sites.
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- While this will improve the project economics for developers, implementation remains largely untested.
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- Alternatively, lower PLFs need to be compensated by either cutting down the project cost substantially, or by obtaining best deals for operation and maintenance (O&M) of the wind turbines, or by locking-in low cost funds, most often a combination of all of these.
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- Clearly, higher capacity wind turbines are going to come at a cost and there are limitations to the concessions that can be obtained from O&M players.
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What are the upcoming uncertainties?

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- **From April 1, 2017, the tax relaxation for infrastructure projects under 80IA shall cease.**
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- Further, wind power plants commissioned after this financial year will not be eligible for generation based incentives.
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- **Accelerated depreciation will reduce from 80 per cent to 40 per cent.**
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- This kind of aggressive bidding is not new to us. Starting from BoT road projects awarded a decade back, to coal mining, telecom spectrum and more recently, solar power and hybrid annuity model (HAM) projects in the road sector, this issue has been ingrained in the system.
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Source: Business Line

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