

WEST BENGAL

Stabilizing Power Demand with New Tariff Scheme

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■ *Bappadiya Chatterjee*

The West Bengal Electricity Regulatory Commission and the state power department and power utilities are drawing up a time-of-the-day (TOD) tariff scheme to stabilize power demand in the state. The scheme also aims at averting huge demand fluctuation. The move comes at a time when left parties in the state are gearing up for protests on high electricity tariff being levied on domestic consumers. The Mamata Banerjee-led government in West Bengal has chalked out a detailed strategic business plan to bring reforms in the power sector.

TOD tariff and its implication

Rabindranath Sen, Chairperson, West Bengal Electricity Regulatory Commission, told BE, "The objective of the plan is to reduce power consumption during peak hours while incentivizing power consumption when the power demand is low. The plan is expected to reduce the energy bills of consumers through time-wise differentiation of tariffs during a day." Power demand is usually low at night but gradually picks up in the morning and reaches at a high level in the afternoon. The power demand usually plateaus around late afternoon and it goes up sharply in the evening. TOD tariff mechanism offers a lower tariff at lean hours (when demand is low) and higher tariff during peak hours.

Speaking at the sidelines of an event, Green Growth and Energy Security in India: Political Economy Transformation and Challenges, organised by the Consumer Unity & Trust Society (CUTS International), India, with support from the Friedrich-Ebert-Stiftung (FES), India, Sen told BE, "TOD tariff is, at

R.N. Sen speaking at the event, Green Growth and Energy Security in India: Political Economy Transformation and Challenges, organised by the Consumer Unity & Trust Society (CUTS International), India, with support from the Friedrich-Ebert-Stiftung (FES), India



present, available for commercial consumers but once such a mechanism is finalized, big cooperatives and domestic consumers can also avail of such metering system. After rolling out such tariff arrangement, electric supply companies will offer consumers a choice between TOD metering and conventional metering. However, TOD meters need to be abundantly available to make a success of such a scheme."

"We aim to use TOD tariff and solar power to stabilize electricity demand at around 6,000MW to avoid a fluctuating demand ranging approximately between 4800 MW and 8000 MW," he added. This tariff mechanism would benefit the agricultural and industrial sectors. Water lifting pumps and furnaces at manufacturing units can be operational at night to reduce the demand in the evening and will increase at night when the load is low. "TOD scheme is a tool to promote green practices. Balancing the load is important to increase the efficiency of thermal power plants so that they use less fossil fuel to produce a kilowatt of electricity. It also makes business sense," he said. Apart from TOD tariff, solar utilization is also important.

Solar implication

The Purulia solar pump storage project will consume thermal power during lean hours to pump water up and then discharge it during peak hours to toss the turbines and generate electricity. A 900MW pump storage plant is in operation in the Purulia district of West Bengal. The government will commission a 1,000MW plant at Turga in the same district to balance the growth of power demand in future. The cost of the five-year project was estimated at ₹3,500 crore. The West Bengal State

Electricity Distribution Company Ltd. (WBSEDCL) is to set up a 1,200MW solar power plant in four phases. About 1,000 acres have already been identified in East Midnapore for installation of 300MW solar panels in the first phase of the project.

Sen also said that the state government planned to set up roof-top solar power grids. WBERC has also proposed roof-top solar grids to lower the electricity consumption load during afternoon particularly during 2.30 pm-3pm. The state had earlier set a target to generate 18MW through roof-top solar grids by 2019, but it has now revised it up to 30MW-35MW. Meanwhile, a 10MW solar panel project along the 80-km bank of Teesta canal and a ₹68-crore project will be implemented by WBSEDCL with partial funding from the Union New and Renewable Energy Ministry.

Reform measures

Besides this, WBERC has been developing a blueprint on generation, distribution and transmission, SOP (standard of performance), consumer services, renewable energy and energy conservation, use and application of information technology, and HR-related issues.

Sen said that the strategy paper addresses issues related to

poor quality of power in a number of areas, high AT&C loss (nearly 35%), unreliable and weak distribution network, wide voltage fluctuation and tripping of lines due to rain or wind, breakdown of lines and equipment causing frequent outages in supply, wide gap in peak and off-peak demand, availability and quality of fuel, poor quality of construction and equipments, ageing fleet, shortage of qualified manpower, poor operating practice, etc.

The strategy paper proposes conducting a survey for baseline data and gap analysis, action plan for reaching out to end-users, organising communications through NGOs/station managers, educating end-users and outreach initiatives, carrying out supplementary surveys for identifying the gap, and segregating sector-wise feeder. It also includes changing light loads by LEDs, LED retrofitting for evening load chopping for domestic consumers, emphasis on solar roof-top programme with day peak demand rising nearly 1500 MW, Sen said.

The state advisory committee formed for the purpose had its first meeting on July 30, following which different sub-groups were formed to look into key concerns. They met on September 15 and will again meet on October 15. Following several periodical reviews and monitoring programmes, the roadmap is expected to be finalized in April, 2016. ■

The multi-product SEZ, financed by Srei and marketed by Attivo, slated to become one of India's largest industrial zones

AMRL Hitech City, a multi-product Special Economic Zone (SEZ) financed by Srei and marketed by Attivo, is ready to reshape Tamil Nadu's infrastructure landscape. Spread over 2,518 acres in Nanguneri, AMRL Hitech City is creating a sustainable and comprehensive industrial zone of international standards. The SEZ will house a diverse set of industries (electronics, general engineering, auto ancillaries and components, solar and many more) and has the potential to generate employment in excess of 50,000 over the next decade.

The first phase, involving 1,250 acres, is offering investors an opportunity to actively participate in the Tamil Nadu growth story. The Global Investors Meet, 2015 has successfully showcased the attractive growth prospects in Tamil Nadu and demonstrated the state government's commitment in maintaining the state's position as one of India's most preferred investment destinations. Speaking on the occasion, Indranil Dasgupta, CEO, Attivo Economic Zones, said: "Tamil Nadu has successfully positioned itself as one of India's most preferred manufacturing destinations. AMRL Hitech City envisages a self-sufficient

industrial environment that ensures optimal business and industrial growth for diverse sectors, and higher level of national and global connectivity. There is a conscious effort to nurture environment-friendly practices and promote ecological sustainability. AMRL Hitech City is slated to become one of India's largest self-contained industrial zones."

The multi-product SEZ provides easy access to the Tuticorin port and airport, and is well-connected with road and rail networks, allowing industries to connect and communicate with both global and national markets. This is complemented with assured water supply, world-class telecommunication infrastructure and availability of skilled, employable and inexpensive human resources. N. Eswara Rao, President, AMRL Hitech City, added: "Investors have already recognised the potential of AMRL Hitech City. Over 100 acres have been leased out to more than 25 customers. The company has received enquiries for another 800-900 acres. We have seen significant interest amongst the MSME segment for the AMRL Hitech City SEZ both prior to and during the Global Investors Meet, 2015." ■