

NEWS ON ELECTRICITY DEVELOPMENTS

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By

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News on Electricity Developments (NED) is a monthly compilation of news prepared by Prayas (Energy Group) and CPSD, YASHADA for the participants of Training Programmes conducted by YASHADA (Yashwantrao Chavan Academy of Development Administration). Prayas is an NGO based in Pune, engaged in analysis and advocacy on power sector issues. This news update covers the key news in power sector at the national level and also in the state of Maharashtra during June 2007.

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1. National Level Developments

1.1 Energy Conservation

With the power crisis increasing in all parts of the country, the Centre is exploring energy conservation options to control the situation. The mandatory enforcement of the new Energy Conservation Building Code (ECBC) is expected to yield annual savings of 1.7 billion units in the first year itself.

The proposed ECBC specifies minimum requirements for the energy-efficient design and construction of buildings across the country, varying based on the different conditions in the five climactic zones. It prescribes standards for external walls, roof, glass structure, lighting, heating, ventilation and air conditioning. According to the Bureau of Energy Efficiency, this would reduce energy use for new buildings by about 25-40 per cent. The implementation of the code would be voluntary initially. It is being recommended for commercial buildings that have connected loads above 500 kW or contract demands of over 600 kVA.

The Centre has also undertaken a new initiative to offer Compact Fluorescent Lamps (CFLs) at low costs to families living below the poverty line (BPL). A buyback provision for fused lamps in order to limit environmental hazard arising from negligent disposal has also been offered.

Some states have also started promoting CFLs through different schemes. Punjab, Haryana and Delhi have issued directives for mandatory installation of CFLs in Government buildings. The state of Haryana is buying CFLs in bulk, and selling them to consumers with a "Buy one, Get one Free" offer. Binola village in the state has emerged as the country's first village with all-CFL homes, where the 100-odd households have replaced incandescent bulbs after a Government promotion drive involving panchayats.

Going a step further, the Dakshin Haryana Bijli Vitaran Nigam (DHBVN) has made it mandatory for domestic and commercial consumers in its region to use compact fluorescent lamps (CFLs) or any other energy saving device in place of conventional incandescent bulbs. DHBVN supplies electricity to 18 lakh consumers in south Haryana and has said that henceforth it will release power connection to only those applicants who agree to use CFLs.

1.2 Restructuring of SEBs

Eight states .— Bihar, Jharkhand, Kerala, Punjab, Chhattisgarh, Tamil Nadu, Meghalaya and Himachal Pradesh — have been asking for more time to unbundle their electricity boards into separate transmission, generation and distribution entities. The unbundling is being opposed by the SEB employees as it is seen as a step towards privatisation, and possible job losses.

Under the Electricity Act, 2003, all SEBs were supposed to be unbundled by 2004. 12 states have unbundled their SEBs so far — Assam, Maharashtra, West Bengal, Orissa, Haryana, Andhra Pradesh, Uttar Pradesh, Uttaranchal, Rajasthan, Delhi, Gujarat and Madhya Pradesh.

At the Chief Minister's meet Tamil Nadu sought to convey through its appeal, that re-organisation or un-bundling should not be mandatory but advisory. The State has based its stand on the strengths of the Tamil Nadu Electricity Board (TNEB). The Board claims that its transmission and distribution losses of 18 per cent and billing and collection efficiency of 99 per cent are among the best figures in the entire sector and under such circumstances, there is no need for unbundling.

In addition to this, the Tamil Nadu Power Engineer's Organisation has urged the State Government to ensure that TNEB remain a public sector entity as a move to privatise it would affect the people, besides causing the agriculture sector to collapse.

Also, the Northern India` Power Engineers Federation (NIPEF) has demanded Immediate Review of Electricity Act-2003 to stop the unbundling of state electricity boards. The executive committee of NIPEF held its meeting at Shimla and discussed the power scenario of the northern region. The meeting was attended by the representatives of Punjab, Haryana Uttar Pradesh, Himachal Pradesh and Rajasthan. NIPEF claims that the Electricity Act, 2003 Act weakens the power of the states to have a say in the power sector.

1.3 Delhi Issues

1.3.1 Surplus Power Sale

The Delhi government has asked the distribution companies to meet the requirements of the Capital first before selling surplus power to other states.

To ensure that the distribution companies do not flout the rules, the Power Department has asked the companies to check the supply situation with other distribution licensees before selling power to other states. Senior officials at the State Load Dispatch Centre will monitor and enforce the directive on sale of surplus power.

1.3.2 Pre-paid Meters

The Delhi Power Department has made it mandatory for all Government departments and autonomous bodies having single-phase and three-phase electricity load below 45 kilowatt (KW) to install pre-paid meters from 1st July 2007. The outstanding dues that different government departments owed to distribution companies amounted to Rs 215 crore. These defaults by the government are likely to get stop after the move to install pre-paid meters. The distribution companies are to identify the qualifying premises and install the meters.

While small government offices with a connected load of 45 KW will have to switch to the pre-paid meter system, big offices, including those belonging to the Central government, with a load of above 45 KW will have to install the automatic meter reading system (AMR). In case of AMR, distribution companies will send an electronically generated bill to the departments for consumption of electricity on various units identified to function under the AMR system.

1.3.3 Power Theft

The enforcement team of North Delhi Power Ltd. (NDPL) with assistance from CISF (Central Industrial Security Force) and Delhi Police conducted joint raids in several areas having high theft levels in its distribution network and booked 214 consumers for "direct theft" and "dishonest abstraction of electricity". The total load being stolen was 1,042 KW worth Rs 1.50 crore. The team removed over 2,000 illegal hooking. The areas where raids were conducted have been known for power theft.

1.4 Coal Blocks - Allocation and Sharing

The Central Government has approved the allocation of 39 coal blocks for various state-run and private power utilities. The Power Ministry has allocated

10 coal blocks having reserves worth 6,075 million tonnes to central and state government companies, while another 12 blocks having reserves of 800 million tonnes have been allocated to public and private companies under the captive mining dispensation. With the latest allocation, the total number of coal blocks allocated has increased to 163.

Also, the Ministry of Coal, the State Governments and the distribution companies have worked out modalities for sharing the coal earmarked for allocation to power producers. Seven coal blocks with estimated reserves of coal of 2.55 billion tons have been identified for allocation to state distribution companies.

The Ministry of Coal has said that there is a need to accelerate development of coal blocks already allocated to the power projects in view of the fact that in 60% cases coal mining is yet to start. The NTPC had postponed coal production in one of their allotted mines from 2007-08 to 2010-11.

1.5 Environmental Issues

1.5.1 Fly Ash Disposal

The National Thermal Power Corporation (NTPC) Ltd. has opposed a proposal by the Environment Ministry calling for early disposal of fly ash and lesser storage time. NTPC has rejected a timeline set by the Ministry for clearing the existing fly ash at its various thermal stations. Fly ash, a byproduct of thermal power plants, is a major pollutant - for water, air as well as soil.

The Environment Ministry issued a new draft notification on the use of fly ash generated from coal and lignite-based thermal power stations in April. NTPC and other power companies using coal and lignite were asked to submit their comments on the new norms. NTPC, in its reply has said that the notification puts the onus of ash utilization (fly ash, bottom ash and accumulated pond ash) on the power companies. However, NTPC has agreed with a CEA suggestion to convert ash ponds into green areas and has asked the Environmental Ministry to consider the already converted green areas as ash utilization.

1.5.2 Hydro Projects in Sikkim

The National Thermal Power Corporation (NTPC) Ltd. has opposed a proposal by the Environment Ministry calling for early disposal of fly ash and lesser storage time. NTPC has rejected a timeline set by the Ministry for clearing the existing fly ash at its various thermal stations. Fly ash, a byproduct of thermal power plants, is a major pollutant - for water, air as well as soil.

The affected people of North Sikkim, especially those from the indigenous Lepcha community, have been on an indefinite hunger strike to oppose the many hydro projects planned in the state. The Affected Citizens of Teesta (ACT), an organisation spearheading the campaign against mega hydro power projects in the State, is leading the hunger strike. Members of Concerned Lepchas of Sikkim and the Sangha of Dzongu are also taking part in the strike. The group is trying to draw the attention of the State Government to the long-term implications of setting up mega hydro-electric power projects, especially in the Dzongu area of North Sikkim.

Six mega projects have been planned in the Dzongu area alone. The 260-MW Panang project, planned for the Dzongu heartland, has already been awarded to a private consortium. The Dzongu area in North Sikkim, home to the Lepcha people, is a restricted and protected area under the old laws of Sikkim. The people of Dzongu are demanding an immediate halt to all the projects planned in the area. They also want protection for the environment and ecology associated with the Khangchendzonga National Park and the Khangchendzonga Biosphere Reserve.

Altogether 22 new mega hydro-power projects on the Teesta and its major tributaries have already been awarded by the State Government to various public and private sector power developers. The State will receive 12 per cent free electricity from each of these projects and plans to sell the surplus to other States.

1.6 Gas Issues

The Bombay High Court, in its decision, has restrained the Mukesh Ambani-led Reliance Industries (RIL) from selling gas from its Krishna-Godavari (KG) basin block in Andhra Pradesh to any company other than the National Thermal Power Corporation (NTPC) and Anil Ambani's Reliance Natural Resources Ltd

(RNRL) for the first eight years of production. The Bombay High Court has asked RIL not to create third-party rights for the natural gas for the first eight years starting 2008. RIL plans to begin production from the block in July 2008, with initial output of close to 40 million standard cubic metres per day (MMSCD). Peak output would touch 80 MMSCD later.

RIL has a contract with RNRL to supply 28 MMSCD of gas from the KG basin. RIL had also committed to supply 12 MMSCD of gas after winning a bid as the fuel supplier for NTPC's Kawas and Gandhar power projects. The matter, however, is now in court. Differences have cropped up between RIL and NTPC over clauses in the gas supply agreement. Currently, the two parties are engaged in out-of-court settlement talks wherein RIL has offered a gas price of \$6 per MMBtu which is significantly higher than the price quoted by the company at the time of winning the bid (\$2.97 per MMBtu).

1.7 Captive Power Plants

With new amendments in the Electricity Act, the Central Government has de-licensed the supply of power, produced by captive power producers. Power from captive power plants can now be used, albeit at a higher unit tariff, to overcome peak shortages. Even before the amendment, no license was required to set up captive power plants by individuals, groups and cooperatives, but now even the supply of electricity generated from captive power plants to any distribution licensee has been de-licensed.

The Centre amended the Electricity Act following pleas by captive power producers and also by industry chambers, including Confederation of Indian Industry. The installed capacity of captive power producers (with a capacity of more than 1 mw) is estimated at around 20,000 MW. However, the average plant load factor (PLF) for these plants is around 43%.

1.8 Power Exchange

Two major contenders are in the process of getting a regulatory approval from the Central Regulatory Commission ((CERC) to set up national power exchanges (PXs). The first is a joint venture company being promoted by NTPC Ltd, Power Grid Corporation of India Ltd, Power Finance Corporation, National Hydroelectric Power Corporation and National Commodities and Derivatives

Exchange Ltd. The second contender is a Financial Technologies (India) Ltd-MCX (Multi Commodity Exchange)-led venture.

A handful of other smaller players have also shown interest in setting up exchanges. CERC had earlier said that at least one power exchange would get operational by the year-end. Currently, inter-regional power transfer capacity of slightly over 6,000 MW is available in the country according to Government estimates. Short-term power trading or trading on daily requirement accounts for about 15 per cent on an average of the total power trading volumes.

2. Developments in Maharashtra

2.1 MSEDCL Issues

2.1.1 Transformer Repairs

The Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) has ordered a statewide probe into alleged irregularities involving the repair of transformers and the use of oil. Two engineers have been suspended in this connection. A probe has been ordered in the wake of irregularities noticed in Amravati zone of Vidarbha region where transformers were repaired by another contractor for Rs. 8 lakhs although they were still under the guarantee period.

A section of the Subordinate Engineers Association in this zone had gone on a flash strike protesting against the suspension. The association has demanded the immediate revocation of suspension orders against the two engineers.

2.1.2 T&D Losses

The Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) has launched an incentive/disincentive scheme for its operation-maintenance staff, to cut its heavy distribution losses. After adopting measures against power theft, the Discom managed to cut losses by about 3 per cent last fiscal. The MSEDCL's losses vary between 9 per cent in Navi Mumbai division to 60 per cent in districts like Osmanabad, Latur and others.

Under the new scheme, employees of the division under whose jurisdiction there will be substantial loss reduction will get performance incentive equal to their basic salary. However, employees failing to bring down losses will face a reduction in salary. The maximum disincentive recoverable from an employee for a quarter shall not be over 15 per cent of his/her monthly basic salary.

2.1.1 Power Theft

MSEDCL is set to undertake a massive anti-power theft drive in the city in a bid to reduce energy losses and increase revenue. A team of 50 technical and non-technical staff members has been constituted to expose power theft. The team will be assisted by 25 police personnel and security guards.

MSEDCL stated that in some sub-divisions in Pune city, the transmission and distribution (T&D) losses had risen above 30 per cent while in rural parts it had gone up to 40 per cent. Those found indulging in power theft will be booked under Sections 135, 138 and 126 of the Electricity Act 2003. The materials used in carrying out the power theft will also be seized. However, MSEDCL declared that efforts will also be made to convince people to take official electricity connections and a simultaneous drive will be implemented to give official connections.

2.2 MERC Issues

2.2.1 REL Tariff Order

Reliance Energy Ltd (REL) has once again approached the Appellate Tribunal for Electricity (ATE) seeking clarification regarding its judgment on the issue of treatment of contingency reserves. The Maharashtra Electricity Regulatory Commission (MERC) in its tariff order has ordered the use of the contingency reserve accumulated by REL in the past - to reduce the tariff burden on Mumbai consumers. These reserves amount to about Rs 75 crore. REL consumers have contributed to the creation of these reserves in the past.

However, REL contends that MERC cannot deduct the contingency reserves from its revenue requirement for 2006-07 and has specifically asked the ATE to reverse this decision. If this plea is accepted by the ATE, Mumbai suburban electricity consumers would be burdened with Rs. 75 crore (2.5%) over and above the previous tariff hikes.

2.2.2 Appeals in the Appellate Tribunal for Electricity

The Appellate Tribunal for Electricity (ATE) has dismissed the appeals made by the Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) against MERC orders regarding the Schedule of Charges, captive power plants, and approval of MSEDCL's infrastructure plan.

MSEDCL had contended that the Service Line Charges (SLC) specified in the Schedule of Charges, should be allowed. Also, MSEDCL had challenge the authority of MERC to reduce the capital expenditure proposed by MSEDCL. All these appeals were overturned by the Tribunal without granting any significant relief to the State Distribution Company.

2.2.3 PPA for the Teesta VI Hydro Project

The Maharashtra Electricity Regulatory Commission (MERC) has granted approval to MSEDCL for purchasing power from the 500 MW, Teesta VI hydroelectric project in Sikkim developed by M/s Lanco.

MSEB will procure approximately 2100 Million Units (MU) of electricity from this project at the rate of Rs. 2.85/unit. This cost includes the transmission charges. The project is expected to start generation around 2012.

2.3 Dabhol Issues

The Maharashtra cabinet accepted a proposal to give concession in Value-Added Tax (VAT) to Ratnagiri Gas and Power Pvt Ltd's (RGPPL) Dabhol plant on purchase of gas from GAIL India Ltd. This is expected to put a burden of around Rs. 40.17 crore on the state's exchequer annually (at the present world price of \$ 5.94 per MMBtu of gas). However, in a recent meeting, the Maharashtra Government rejected RGPPL's proposal to share an additional burden of 18 paise towards debt service coverage ratio in the tariff during 2007-08. Instead, the state government told RGPPL to readjust its loan of Rs 8,000 crore drawn from various lenders comprising IDBI, ICICI.

Currently, MSEDCL is buying power from RGPPL at around Rs 6 per unit and its monthly outgoing towards RGPPL is around Rs 150 crore. However, once the plant starts generating power from gas - for which the Dahej-Dabhol pipeline of GAIL India is now ready - instead of from Naphtha, the cost will substantially reduce.

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Sources

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Glossary of Terms

ABT	Availability Based Tariff
ADB	Asian Development Bank
ARR	Annual Revenue Requirement
ATE	Appellate Tribunal for Electricity
BST	Bulk Supply Tariff
CCGT	Combined Cycle Gas Turbine (based power plant)
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CPP	Captive Power Project
Crore	10,000,000 (10 millions)
CSIs	Civil Society Institutions
DISTCOM/ DISCOM	Distribution Company
DSM	Demand Side Management
FDI	Foreign Direct Investment
Financial Year	Indian Financial Year - 1 st April to 31 st March. Typically represented as FY 98-99 etc.
GENCO	Generation Company
GoI	Government of India
GoM	Government of Maharashtra
GRF	Grievance Redressal Forum
HP	Horse Power (1 HP = 746 Watts)
HT	High Tension (or High Voltage)
HVDC	High Voltage Direct Current
Hz	Hertz
IPPs	Independent (Private) Power Producers
IPS	Irrigation Pump Sets

IRP	Integrated Resource Plan (usually implying a least-cost plan that takes an integrated view toward all energy options)
kCal	Kilo Calories
kg	Kilograms
kV	Kilo Volt
kVA	Kilo Volt Ampere
kW	Kilo Watt
kWh	Kilo Watt Hour
LNG	Liquefied Natural Gas
LT	Low Tension (or Low Voltage)
MDBs	Multilateral Development Banks (such as the WB and ADB)
MERC	Maharashtra Electricity Regulatory Commission
MoP	Ministry of Power
MoU	Memoranda of Understanding
MP	(The Indian state of) Madhya Pradesh
MSEB	Maharashtra State Electricity Board
MSEDCL	Maharashtra State Electricity Distribution Company Ltd (Distribution Company of MSEB after unbundling)
MSETCL	Maharashtra State Electricity Transmission Company Ltd (Transmission Company of MSEB after unbundling)
MSPGCL	Maharashtra State Power Generation Company Ltd (Generation Company of MSEB after unbundling)
MU	Million Units (million kWh)
MW	Mega Watts
NGOs	Non-Government Organisations
NHPC	National Hydro Power Corporation
NPC	Nuclear Power Corporation
NTPC	National Thermal Power Corporation
O&M	Operation & Maintenance
PFC	Power Finance Corporation (a Gov-owned financing agency for the power sector)
PLF	Plant Load Factor (also called Capacity Utilisation Factor)
PTC	Central Power Trading Corporation
R&M	Repair & Maintenance
RBI	Reserve Bank of India
RC	Regulatory Commission
REC	Rural Electrification Corporation, New Delhi
REL	Reliance Energy Limited
Rs	Rupees (Indian currency)
SEBs	State Electricity Boards (vertical monopoly power utility owned by the state government)
SERC	State Electricity Regulatory Commission
T&D	Transmission and Distribution
TEC	Techno Economic Clearance
TOD	Time-Of-Day
TPC	Tata Power Corporation

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