NEWS ON ELECTRICITY DEVELOPMENTS

Issue III – May 2007

(Compilation of news in April 2007)

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 April 2007.

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1. National Level Developments

1.1 Ultra Mega Power Projects

The Ultra Mega Power Projects (UMPPs) planned by the government are facing hurdles with six of the projects yet to secure basic clearances. The UMPP awarded to Tata Power Company in Mundra is the only one that is running on course.

The Power Finance Corporation (PFC) has transferred Coastal Gujarat Power Ltd — the special purpose vehicle set up for the 4,000-MW Mundra ultra mega power project — to Tata Power Company. With the formal execution of the transfer documents between PFC and Tata Power, the latter can now go ahead with the various development activities required for the project.

The first project to be awarded to the Lanco Infratech Ltd. and Globeleq Singapore Ltd. consortium at Sasan is mired in controversy. Due to developments relating to the change in ownership of Globeleq Singapore from Globeleq Ltd, UK to Lanco Infra and Jindal Steel and Power Ltd (JSPL), the bid for Sasan has gone back to the bid evaluation committee, formed by the PFC.

The UMPP in Tamil Nadu is facing a roadblock due to the government's bid to set it up in Nagapattinam as against the earlier identified site at Cheyuur in Kancheepuram district. In Orissa where the plant was to come up in Jhasuguda, the shortage of feasible sites due to over-allotment of land for power projects has created a roadblock.

In Tadri (Karnataka) and Girye (Maharashtra), the projects are facing environmental roadblocks, while the Akaltara project in Chhattisgarh has been delayed by the state government's demand that it should be given 12% of the power free of cost.

In another development regarding the Ultra Mega Power Projects, the Ministry of Power (MoP) has said that customs duty exemption and income tax holiday under the mega power policy would be made available only to states that make a commitment to privatise distribution in cities having a population of more than one million. This has led to a disagreement between the Center and the States which have opposed the move on the ground that withdrawal of concessions would lead to an increase in tariff. The states have expressed their inability to make such a commitment, as it would need a consensus among various political parties and employees.

1.2 Delhi Issues

1.2.1 BSES Yamuna Power on the brink of financial crisis

Five years after its privatization, the Anil Dhirubhai Ambani group controlled

BSES Yamuna Power Ltd. (BYPL) is facing a financial crisis – shortfall estimated at Rs.900 crore for the current fiscal. The company has asked the Delhi government for help to tide over the crisis. BYPL supplies power to 8.5 lakh consumers in the poorer central and eastern regions of Delhi.

BYPL has written to the state power regulator about the high cost of power expected to create a cash crunch for the company. BYPL has expressed concern at the current mechanism of distributing power purchase agreements (PPAs), which might increase the power purchase cost of BYPL by about 25%. BYPL has witnessed the fastest increase in bulk supply tariffs, compared to BSES Rajdhani and the Tata-owned NDPL over the last two years. While the bulk supply tariffs for BRPL and NDPL have increased by 15.5% and 13.4% respectively, for BYPL it has been a 53.3% increase.

The company has urged the government to intervene by way of provision of a non-interest bearing loan to bridge the cash gap and immediately disburse an up-front subsidy. It has also asked that firm allocation from the power pool be made to BYPL for the purpose of trading and income from trading be included in the company's revenue.

On the other hand the Delhi Government has taken a stern view of the power situation in the capital. It has warned of extreme steps if the distribution companies do not take adequate measures to handle the crisis. The Government has particularly singled out BSES Yamuna in the reprimand. The power shortage in Delhi is about 300 MW leading to one to five hour power cuts across Delhi.

1.2.2 BSES Energy Saving measures by BSES

BSES had launched an energy saving scheme to tide over the power shortage situation in the capital. It has extended this scheme launched in October till June 30th 2007. This scheme consists of concessions on the price of CFL bulbs – buy one, get one free.

BSES claims that in about five months since its launch, over 3.5 lakh CFLs have been sold leading to reduction in maximum demand by nearly 23 MW at a given point of time-- saving over 33 million units of electricity annually.

1.3 Rural Electrification

1.3.1 Rajiv Gandhi Grameen Vidyutikaran Yojana

There has been an inordinate delay in the release of funds by the Center resulting in the stalling of rural electrification under the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) in Orissa. The State has submitted rural electrification project proposals for 29 out of 30 districts to the Ministry of

Power (MoP) by the end of the previous year.

However the Ministry has approved proposals for five districts in principle and has released funds only for two districts. Angul, Nayagarh and Jajpur were the first to get approval from the Ministry. It has recently released Rs 67.17 crore for Angul and Nayagarh districts while having initially approved a cost of Rs.119.91 crore for Angul district and Rs.114.69 crore for Nayagarh district. Although the Ministry has sanctioned Rs 162.73 crore for Jajpur district, no funds have been released so far.

The National Thermal Power Corporation (NTPC) is the central agency to execute the rural electrification programme in Angul and Nayagarh districts. It has completed all formalities including the surveys and preparation of detailed project reports. But in the absence of funds it has been unable to take the programme forward.

According to the Orissa state government estimate about 9866 villages having more than 54.70 lakh households are still without power. The original target was to provide access to electricity to all the villages by 2007 and all the households by 2009. The revised target is to complete the programme by 2009 and 2012 respectively. Apart from NTPC, two more central agencies - Power Grid Corporation of India Limited (PGCIL) and National Hydro Power Corporation (NHPC) - have been engaged in the rural electrification programme.

1.3.2 Rural Electrification Through Alternate Energy

Despite several schemes of the government the process of rural electrification by extending the existing grid (through conventional grid connectivity) has been slow. About 56% households do not have access to power supply. The 2001 census has identified 5,19,570 villages which do not get power, but can be connected with the conventional power grid. The government has also identified about 18,000 villages in remote areas which are not possible for grid connectivity. These villages have, therefore been selected to be electrified by generation of power from renewable sources of energy.

According to the data available with the ministry of new and renewable energy (MNES), 2,501 out of identified 18,000 remote villages have been electrified to date. The government has also claimed that in 2006-07 alone 264 remote villages and 236 hamlets in nine states were electrified through new and renewable sources of energy. Projects are under implementation in 1,247 villages and 487 remote hamlets.

The ministry for new and renewable energy sources has estimated a potential for 84,776 MW grid-interactive power generation from non-conventional sources, like agro residues, wind power, small hydro projects, cogeneration from bagasse and from industrial wastes.

1.4 Reduction in AT&C losses

The Central government has warned that assistance to states and power utilities under the revised Accelerated Power Development & Reform Programme (APDRP) would be linked to them reducing aggregate transmission and commercial (AT&C) losses to 15%. AT&C losses are computed as a percentage of electricity for which revenue is not collected, against units of electricity fed into the distribution system. Due to lack of adequate investment in the transmission and distribution network these losses have been consistently high across the country. Such losses are in the range of 12% in Andhra Pradesh to 78% in Manipur.

The Centre has directed states to present individual plans to reduce AT&C losses to 15% through by the end of the 11th Five-Year Plan. The target period would be determined after the establishment of validated base-line data. The base-line data and the reduction in AT&C losses would be verified by independent agencies appointed by the power ministry.

The power ministry had offered a variety of suggestions to states and utilities to be able to achieve this target. These suggestions include bifurcation of agricultural feeders from domestic feeders, 100% feeder, distribution transformer and consumer metering

1.5 Revision in Unscheduled Interchange (UI) Charge

The Central Electricity Regulatory Commission (CERC) has hiked the price for overdrawing power (UI) when the grid frequency is low from Rs.5.70 to Rs.7.45 per unit. This step has been taken in order to curb the grid indiscipline which has been seriously affecting all the regional grids these last few months, and subsequently ensure grid security.

Uttar Pradesh Power Corporation Ltd. opposed the hiking of this charge and contended that this move will go against the interest of consumers. UP was amongst the most consistent violators of grid discipline last summer as it kept overdrawing even when frequency was dangerously low. It was also fined Rs 1 lakh for this over-drawal. The CERC order however dismissed UP's plea holding that the consumers shall have no adverse financial burden if the state utilities remain within their prescribed limit and do not overdraw power.

The power grid is connected to the entire country grid except the southern grid.

Thus the Commission has taken the view that grid collapse due to states' over-drawal has to be avoided at all costs. Otherwise, any mistake may result in outages across the country for several hours till the system is rectified.

1.6 Multiple Time Zones to reduce Peak Demand

The Center is considering a proposal to have different time zones in the country with the aim of staggering the office and school timings by about 1-2 hours. This would spread out the peak hours and reduce pressure on electricity grids. This recommendation from the Parliamentary Standing Committee comes at a time when the peak shortages in the country have increased to 13.9% in 2006-07 and the capacity addition targets in the Tenth Plan have failed to materialize.

India currently has a single time zone. But the country's east-west span of more than 2,000 km covers over 28 degrees of longitude, resulting in a two hour difference in the sun rise and set across the eastern border and the Rann of Kutch in the far west. The main merit in having differential timing is that eastern States could advance their clocks and avoid the extra consumption of energy after daylight hours. Besides, office timings in an eastern hub such as Guwahati or Kolkata could be earlier than say in Mumbai or Ahmedabad in the west, thereby staggering peak consumption timings.

2. Developments in Maharashtra

2.1 Ratnagiri Gas and Power Pvt. Ltd. (RGPPL)

The Maharashtra cabinet has given its approval for the power purchase agreement (PPA) for the drawal of 2,150 MW of power between Ratnagiri Gas & Power Pvt. Ltd. (RGPPL) and the Maharashtra State Electricity Distribution Company Ltd. (MSEDCL). The state cabinet has approved the drawal of power at the per unit tariff of Rs 3.10 for a period of 25 years.

Of the Rs. 3.10, the fixed cost component has been estimated at 98.50 paise, originally projected at 96 paise. However, it has been increased following the hike in RGPPL's working capital. The variable cost has been estimated at Rs 2.12 after considering an LNG price of Rs 274.44 per Million British thermal units (MMBtu).

GAIL India, which holds 28.3% equity in the RGPPL and RGPPL, have signed a gas sale and purchase agreement whereby 1.5 million tonnes of gas will be supplied to run two blocks of 740 mw each. Gas would be available under the agreement between July 2007 and September 2009. The plant has three blocks for producing power, the first of which is said to be operational by May 1, second by July 1 and third by December 15.

2.2 MERC Issues

MERC has passed the Multi Year Tariff (MYT) orders for all power utilities in the state (MSEDCL, BEST, REL and TPC). The orders would be applicable for next 3 years – FY 2007-08 to FY 2009-10. MERC has approved only the Annual Revenue Requirement (ARR) for the these years; tariff would be determined every year through an Annual Performance Review.

2.2.1 Over-drawal of power by Tata Power Company

The Maharashtra Electricity Regulatory Commission (MERC) heard a plea filed by Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) against Tata Power Company (TPC) for overdrawing 200 MW of power from the state grid on 12th April 2007. As per a 60 year old agreement between TPC and MSEDCL, MSEDCL is supposed to make available power to TPC in case of failure or maintenance of TPC plants. However an increase in demand scenario is not covered by the agreement.

In its order on the issue MERC ordered TPC to stop overdrawing power from the Maharashtra grid. It also ordered TPC to provide a load shedding plan for Mumbai city. MERC said that if TPC cannot cater to increased demand for power in Mumbai, a load shedding plan has to be prepared.

2.2.2 MSEDCL Tariff Order

Consumers in Maharashtra suffering many hours of load-shedding have been spared an increase in the tariff for electricity in the new order passed by MERC. The new order has maintained the existing power rates for consumption of up to 300 units per month and also reduced the fixed charges across categories to compensate for load-shedding.

Unlike Mumbai which will have to pay much more for enjoying uninterrupted power, the tariff order for MSEDCL areas like targets only heavy users. The MERC has also avoided hike in tariff for the agriculture category where people are suffering 15 hours of load shedding.

MERC has directed that the expenditure run up by buying costly power from outside should not be levied on domestic and commercial consumers. The Additional Supply Charge (ASC), the term for costly power purchased from outside, has to be levied only on continuous industries and railways which have the privilege of power throughout the day. ASC had created many billing problems especially for domestic consumers due to incorrect interpretation of MERC orders by MSEDCL.

With the shortage for electricity increasing every day, the MERC has cracked down on malls, multiplexes and advertisement hoardings by increasing their tariff rates manifold. It has created a special category for malls and multiplexes and fixed their tariff at Rs. 8.50 per unit besides demand charges of Rs. 300 per kVA per month. Hoardings will have to pay Rs. 14 per unit, an effective disincentive against keeping them switched on all night.

The regulator has also given a price shock to consumers using more than 300 units per month. For instance, domestic consumers using between 300 and 500 units every month will be charged at the rate of Rs 5 per unit. But the steepest hike has been reserved for consumers with consumption of more than 500 units per month. They will have to pay Rs 5.75 per unit.

MERC has set aggressive targets for distribution loss reduction. MSEDCL is required to reduce the distribution losses (technical loss as well as theft) by 4% every year for the next three years (FY 2008 to FY 2010) from the opening loss level (FY 2007) of 31.7%. Therefore, distribution losses in the state by the end of FY 2010 are projected to be 19.7%.

MSEDCL is directed to refund the Regulatory Liability Charge (RLC) of Rs 500 Cr back to consumers. MERC has mandated MSEDCL to undertake Demand Side Management (DSM) schemes and has assumed a reduction of 2% in the costly power purchase due to DSM. All 11kV feeders and Distribution

Transformers (DT) in the state are required to be metered within next 6 months (by October 2007). Such feeder/DT wise data would be used in future energy accounting and/or load shedding estimation. Though this direction may ensure reliable data, there are significant challenges in its implementation across the state.

2.2.3 BEST Tariff Order

BEST has hiked the per unit tariff for shopping malls with more than 1,000 kWh consumption to Rs. 9.97 per unit, Rs. 14.57 per unit for advertisements and hoardings and Rs. 6.57 per unit for street lights as per the proposed tariff hike by MERC based on the annual revenue requirement (ARR) filed by BEST. However, consumers in the residential, commercial and industrial category do not face a tariff shock according to the tariff order.

MERC has also restricted BEST's power procurement from Tata Power Company (TPC) to 650 MW and directed that 150 MW be made available to other buyers including Reliance Energy Ltd. (REL) which supplies power largely in Mumbai's western suburbs. However BEST has filed a petition in the Appellate Tribunal for Electricity against this MERC order arguing that it had an agreement with TPC and thus was entitled for drawing 800 MW from the company for the next 10 years.

2.2.4 ATE Order on REL's appeal

Reliance Energy Ltd (REL) had appealed in the Appellate Tribunal for Electricity (ATE) against the MERC order on REL's Annual Revenue Requirement (ARR) for FY 2004-05, 2005-06 and 2006-07 (i.e. October 2006 tariff order). In the October 2006 tariff order MERC had disallowed certain expenses claimed by REL and had not passed on the same to consumers. While allowing the REL appeal against this MERC tariff order, ATE has approved most of the claims made by the REL for increased expenditure. The following table shows REL expenses approved by ATE in excess of MERC (for all years – FY05, FY06 and FY07) for recovery from consumers. As a result of this ATE judgment, as shown in the table, Mumbai suburban electricity consumers have to face a tariff increase of around Rs.577 Cr. (i.e. average tariff increase of 80 paise/kWh to recover Rs. 577 Cr. in one year).

Expense Head	**Increase due to ATE Order FY05+FY06+FY07**
Employee Expenses	164
A&G Expenses Rs Cr	80
R&M Expenses Rs Cr	28
Income Tax Rs Cr	227
Fuel Cost Rs Cr	77
Total Rs Cr	**577**

[Note: All figures in Rs Cr]

This hike is excluding the recovery of Rs. 350 Cr. 'rebates' granted by REL between FY 1999 to FY 2004 on selective basis, which as per the ATE judgment dated 22nd May 2006 has to be recovered from consumers of REL.

In addition to these immediate financial impacts, the ATE order also has cumulative and serious long-term implications such as setting an increased baseline for the Multi Year Tariff control period. Through the tariff order (October 2006) MERC had approved a tariff increase of around Rs. 285 Cr after an elaborate public process and public hearings. Therefore, consumer groups requested MERC to hold a public hearing to seek public comments on how to implement the ATE order. However, MERC has rejected this plea and have included the tariff impact due to ATE order in the MYT ARR for REL. ATE has allowed about Rs 264 Cr for FY 2005 and FY 2006 which MERC has decided to spread equally over Mumbai consumers in the next 3 years (Fy 2008 to FY 2010 - Rs 88 Cr every year). Excess amount for FY 2007 arising out of the ATE decision would be trued up in the next annual performance review process (March 2008).

2.2.5 REL's Tariff Order

Similar to MSEDCL's tariff order, low end domestic consumers of REL do not see a significant tariff hike. However, tariff for high-end commercial and industrial consumers have seen a steep hike. Distribution losses are directed to reduce by 0.5% (technical as well as commercial) every year. Opening level of losses for FY 2006-07 are decided at 12.02% (in accordance with the ATE's order). There is a reduction in the expensive power purchase of 2% due to MERC's direction to implement DSM schemes. REL's generation plant at Dahanu is assumed a much higher heat rate (2500 kCal/kWh) as prescribed in the MERC Tariff Regulations 2005 despite its historical performance at about 2300 kCal/kWh. This is in accordance with the ATE order and has resulted in excessive burden of about Rs 80 Cr every year on Mumbai consumers.

2.2.6 MSEDCL Load Shedding Protocol

MERC revised the principles and protocol for load shedding by MSEDCL in February 2007 after conducting a public hearing at Pune and increased the load shedding hours in the state. The issue of load shedding was also discussed in the public hearings on MSEDCL's MYT proposal that concluded on 17 March 2007. In April 2007, MSEDCL submitted another proposal to MERC for revising the Load Shedding hours in the state. MSEDCL in its proposal claimed that the shortage in the state has increased to about 6500 to 6700 MW while the existing load shedding protocol envisaged a shortage of about 5500 to 5700 MW. Hence, MSEDCL requested to increase the load

shedding by revising the existing protocol. Load shedding for all categories was projected to increase by 1-2 hours and a second staggering day was proposed for industries. Moreover, Akshay Prakash Yojana (a voluntary demand management scheme with the village community initiative) was suggested to be discontinued for next 3 months, load shedding hours in single phasing schemes were proposed to be increased.

However, MERC raised serious concerns over MSEDCL's proposal by questioning the reliability of the submitted data. MERC observed that load shedding protocol was revised in February 2007, last public hearing on load shedding took place on 17th March 2007 and nowhere MSEDCL had projected such a sharp increase in shortfall. Moreover, MSEDCL did not purchase costly power when MERC had already approved recovery of such costly power through ASC. MERC's previous directives especially on reducing industrial consumption were also not followed. In light of this, MERC has rejected MSEDCL's proposal for revision in the load shedding protocol in its entirety.

2.3 Other Issues

2.3.1 Power Plant at Raigad

The Maharashtra government has asked Reliance Energy Ltd (REL) to scale down its project at Shahpur village in Raigadh district. This, the government hopes, will help resolve the dispute between Tata Power Company (TPC) and REL over a 1,300-acre plot in the village where both want to set up plants.

Reliance Energy Ltd. (REL) had approached the state revenue department for acquiring 3,460 acres under the Land Acquisition Act, 1894. Tata Power Company (TPC) had simultaneously approached the Maharashtra Industrial Development Corporation (MIDC) to acquire 1,317 acres under the MIDC Act. Both were allotted the same plot. While TPC has proposed a 1,600 MW project on the plot, REL has planned to set up two projects – a coal-based plant for generating 1,200 MW and a gas-based plant for 2,800 MW. The state government has now asked REL to drop the gas-based project

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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 - 1st April to 31st 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 GoI-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
TRANSCO	Transmission Company
WB	The World Bank group