

January 1, 2008

**Press Release**

**Over-drawal from grid to cost more from January 7, 2008**

**Central Electricity Regulatory Commission (CERC) has decided to increase the UI ceiling rate, the maximum price of over-drawing power from the grid, from the present level of Rs.7.45 per kWh to Rs.10.00 per kWh, when the grid frequency goes below the least permissible value of 49 Hertz. The new rates would come in force from January 7, 2008.**

2 The Commission has decided to take this corrective action in response the petition filed by the NRLDC informing the Commission that the frequency of the entire North-East-West (NEW) grid had undergone sharp deterioration. During the month of October, 2007 the frequency remained below 49.00 Hertz for 10% of the time, deteriorating further in November 2007. On 14<sup>th</sup> November 2007 the grid frequency was below 49 Hertz for a record 32.4% of the time.

3 It was brought to the notice of the Commission that despite the prevailing shortages, the States were not giving requisition to purchase costly liquid fuel based generation preferring to overdraw instead. Sometimes up to 800 MW of capacity of combined cycle power stations remained unutilized, not to speak of diesel based captive generating capacity remaining un-harnessed within the States.

4 As a result of sustained low frequency, the under frequency load shedding relays were frequently operating causing avoidable hardship even to the consumers in the States which do not over-draw from the grid.

5 The Commission has come to the conclusion that the existing unscheduled interchange (UI) ceiling rate of Rs.7.45 per kWh notified in April 2007 was not proving adequate for sufficiently discouraging over-drawals and therefore it had become necessary to raise it further.

6 The Commission has also responded to the persistent criticism by the distribution utilities/State Electricity Boards that Central Generating Companies (such as NTPC, NHPC etc.) were taking undue advantage of UI mechanism to earn large sums of extra revenue. **The Commission has modified the scheduling procedure for hydro generating stations regulated by it through separate amendments in the regulations in which the possibility of making extra money on this account has been plugged. In case of thermal generating stations, UI rate for generation above the schedule by coal and lignite fired stations and for the stations burning only APM gas shall now be capped at Rs 4.06 per kWh.** The above UI cap rate shall not be applicable for RLNG/liquid fired generating stations, hydro power plants, merchant plants, merchant capacity and any other generating stations for which its fixed cost is not being reimbursed through capacity charge, etc.

7 In its orders of April, 2007 the Commission had warned that failure to plan for meeting its consumer demand does not entitle any State to overdraw from the grid, and thereby endanger grid security or rob other States of their rightful share.

8 The proposal to increase the UI rate was earlier put up for public comments on December 6, 2007 in response to which comments from thirteen organizations were received. The Commission carefully analysed all the comments received and found that they were by and large diversionary in nature and did not offer any reasonable solution to the problem of maintaining grid discipline. Gujarat Urja Vikas Nigam Ltd (GUVNL) is the only exception which has supported the UI rate hike and is of the opinion that the maximum ceiling of UI price should be fixed slightly higher than the variable cost of generation through liquid fuel so as to ensure that the State utilities schedule the available generation on liquid fuel instead of over-drawing of power from the grid.

9 Frequency is the most critical parameter in power system operation. The standard practice followed globally is to maintain the grid frequency at or very close to the rated value (50.00 or 60.00 Hz, as the case may be) all the time. A deviation beyond 0.05 Hz would be considered alarming in developed countries, and a deviation beyond 0.1 Hz would be unimaginable. However, in India we had a history of frequency varying from below 48.0 Hz to above 52.0 Hz, which led to innumerable grid collapses in the Eighties and Nineties. It was to tackle these problems that a unique mechanism of charging real time deviations with respect

to schedules at the unscheduled interchange (UI) rate was evolved and successfully implemented from the year 2002 onwards. This innovative approach provides commercial incentive and disincentive as inducement for improving and keeping frequency within the safe range of 49.0 – 50.5 Hz.

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