

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

1. **Dr. Pramod Deo, Chairperson**
2. **Shri R.Krishnamoorthy, Member**
3. **Shri S.Jayaraman, Member**
4. **Shri V.S.Verma, Member**

Petition No.72/2008

In the matter of

Problems encountered by Neyveli Lignite Corporation (NLC) on account of fixation of UI cap for coal/lignite/APM gas fired generating stations.

And in the matter of

Neyveli Lignite Corporation (NLC)

.....Petitioner

Vs

1. Tamil Nadu Electricity Board, Chennai
2. Kerala State Electricity Board, Thiruvananthapuram
3. Electricity Department of Puducherry, Puducherry
4. Transmission Corporation of Andhra Pradesh, Hyderabad
5. Southern Regional Load Despatch Centre, Bangalore
6. State Power Purchase Co-ordination Committee, Bangalore
7. Bangalore Electricity Supply Company Limited, Bangalore
8. Mangalore Electricity Supply Company Limited, Mangalore
9. Gulbarga Electricity Supply Company Ltd., Gulbarga
10. Hubli Electricity Supply Company Ltd., Hubli
11. Chamundeshwari Electricity Supply Company Ltd., Mysore
12. NTPC Ltd., New Delhi

.....Respondents

The following were present:

1. Shri N.A.K. Sarma, Advocate
2. Shri R Suresh, NLC
3. Shri E. Gnanaprakasam, NLC
4. Shri R Krishnaswami, TNEB
5. Shri V Suresh, SRLDC

ORDER
(DATE OF HEARING: 16.3.2009)

The petitioner has made this application with prayers as follows:

- “1. *to take on record and consider the difficulties and losses being incurred by NLC due to the newly introduced UI price cap on receivable side.*
2. *to put both the generators and beneficiaries on par, by removing cap on UI rates notified for generators alone.*
3. *If at all, the Hon’ble Commission considers that it is deemed necessary to retain the cap on UI rate for the generators, the same cap to be provided on UI rates for both injections above as well as below the schedule for the generators.*
4. *to pass such order(s) as deemed fit by the Hon’ble Commission.”*

2. The Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Fourth Amendment) Regulations, 2007 (hereinafter called “the said regulations”) were notified by the Commission on 28.12.2007, whereby the Commission, *inter alia*, amended regulation 24 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, and stipulated a new UI rate, by increasing the slope of UI price vector and increasing UI ceiling limit to 1000 paise/kWh, with effect from 7.1.2008. By a proviso to the amended regulation 24, the Commission introduced the concept of capping the rate of UI receivables in respect of coal/lignite/APM gas-fired generating stations at 406 paise/kWh, against the maximum UI payable rate of 1000 paise/kWh. Regulation 24, as amended is extracted hereunder:

“24. **Unscheduled Interchange(UI) Charges:** (1) *Variation between actual generation or actual drawal and scheduled generation or scheduled drawal shall be accounted for through Unscheduled Interchange (UI) Charges. UI for a generating station shall be equal to its actual generation minus its scheduled generation. UI for a beneficiary shall be equal to its total actual drawal minus its total scheduled drawal. UI shall be worked out for each 15-minute time block. Charges for all UI transactions shall be*

based on average frequency of the time block and the following rates shall apply:

Average frequency of time block (Hz)		UI Rate
Below	Not below	(Paise per kWh)
----	50.50	0.0
50.50	50.48	8.0
50.48	50.46	16.0
-----	-----	-----
-----	-----	-----
49.84	49.82	272.0
49.82	49.80	280.0
49.80	49.78	298.0
49.78	49.76	316.0
-----	-----	-----
----	-----	-----
49.04	49.02	982.0
49.02	-----	1000.0

(Each 0.02 Hz step is equivalent to 8.0 paise/kWh in the 50.5-49.8 Hz frequency range, and to 18.0 paise/kWh in the 49.8-49.0 Hz frequency range)”

“Provided that in case of generating stations with coal or lignite firing and stations burning only APM gas, UI rate shall be capped at 406 paise per kWh when actual generation exceeds the scheduled generation.”

Submissions of the petitioner

3. The petitioner, a generating company owning lignite-fired generating stations, is aggrieved by introduction of the cap on rate of UI receivable and has filed the present petition, with the above-noted prayers. It has been stated that there is already a physical cap on generation upto 101% of average generation for the day. Additionally, the concept of UI cap of 406 paise/kWh at 49.66 Hz receivable by the petitioner against the maximum UI payable at 1000 paise/kWh results in hardship and as a consequence the petitioner is said to have suffered losses. The petitioner has submitted that the generating stations owned by it used lignite, an inferior fuel having high moisture content, which posed tremendous operational problems in maintenance of uniform generation on its units. It has been pointed out that forced outages/partial outages are comparatively higher in lignite-fired

generating stations and application of differential UI rates for excess/less injection could considerably increase UI penalty payable for under-generation which needed to be compensated by removing ceiling specified for UI receivable. According to the petitioner, despite revising the schedules a number of times during the day, it became difficult for the lignite-fired generating stations to adhere to the schedules because of the technical reasons, like furnace de-slagging, frequent mill change-over etc peculiar to lignite-fired generating stations, apart from variation in the quality of lignite. The petitioner has submitted that a differential treatment for UI receivable the generating companies, and UI receivable by the beneficiaries, was not justified as it denied the level-playing field to the generating companies, more so when the maintenance of grid parameters was primarily under the control of the beneficiaries, depending upon their drawl pattern. It has been submitted that the Commission should consider the unique features of the petitioner's generating station in powering the linked mines whose consumption pattern could not be decreased or increased in accordance with the demand for generation. The petitioner has accordingly prayed that in view of the difficulties and losses suffered, the Commission may, by removing UI cap applicable to the generating companies bring them at par with the beneficiaries and in case it is considered necessary to retain the UI cap of 406 paise/kWh, it should be applicable to injections above as well as below the schedule for the generating stations.

Submissions of Respondents

4. The first respondent, TNEB has submitted that the case studies carried out on partial/forced outages and drawbacks of lignite as fuel do not reveal any hardship to the petitioner and as such, there cannot be any basis for revising UI cap rate. This respondent has submitted that the marcasite problem at Mine-II had to a large extent been overcome by the petitioner even prior to implementation of ABT by suitable modification to the ash hoppers. That the number of forced shut downs or trippings of units during 1997-2000 period had come down drastically has been relied upon as an evidence. It has been sought to argue that the Commission has already allowed a higher margin for the moisture content of the lignite while fixing the station heat rate for the generating stations owned by the petitioner.

5. The second respondent, KSEB in its reply has opposed the petitioner's plea for removal of UI rate cap. KSEB has submitted that UI was introduced as a penalty for violation of grid discipline and as a disincentive to refrain the over drawl during low frequency period. According to KSEB, UI mechanism cannot be treated as a means to earn undue benefit. KSEB has also opposed clubbing of two or more stages of the generating station for purpose of scheduling and UI computation and a special treatment of mines load in the case of the generating stations of the petitioner. In this regard, KSEB has relied upon the Commission's order dated 15.10.2003, under which the Commission rejected the petitioner's prayer for combining of Stage-I and II of TPS-II generating station for treating it as a single station and Appellate Tribunal vide judgment dated 2.3.2006 has also upheld the order of the Commission on appeal filed by NLC.

6. The fifth respondent, SRLDC has discounted the contention of the petitioner that it incurred losses on account of capping of UI receivables.

According to SRLDC, the petitioner had earned UI of more than 200 paise/kWh on overall basis against UI charges from April 2008 to August 2008, in respect of TPS-II station-I & station-II and TPS-I (Expansion), a rate much above the energy charge rate, applicable to the petitioner's generating station. SRLD has thus opposed the petitioner's submissions.

7. The twelfth respondent, NTPC has supported the case of the petitioner. Even though the petition filed by the twelfth respondent with a similar prayer had been rejected, it has been submitted on its behalf that it also owned some old generating stations which did not have sophisticated controls and as such load variations in units resulted in injection over and above the schedules and for this it should be compensated under the ABT scheme. This respondent has urged the Commission to consider revision of UI cap rate for the reason of the problems encountered by the generating companies in general.

8. The respondents, except the twelfth respondent have prayed for rejection of the petition also on the ground that the issues raised were covered by the decision of the Commission in the order dated 23.6.2008 in Petition No. 17/2008, filed by NTPC. For sake of record we may say that the petition filed by NTPC for somewhat similar reliefs was rejected by the said order dated 23.6.2008. In the said order dated 23.6.2008, the Commission observed that –

“In the light of above, we are not satisfied with the petitioner's contention that there is any immediate necessity to review the UI ceiling rate of Rs.4.06/kWh, specified under Regulation 24 of the 2004 regulations. However, we may add that that we are open to address any genuine hardships resulting from the amendments after some experience is gained of its working. In this direction, the Commission could consider suggestions for clubbing of two or more stages of a generating station for the purpose of scheduling and UI computation, as also for a special treatment of Mines' load in the case of the generating stations owned by NLC .”

“We next propose to deal with the argument of the petitioner that in the event of under-generation on account of tripping of a unit of the generating station, UI incurred would not be compensated by UI earned for over-generation. The petitioner has sought to project that this problem has arisen because of the new cap on UI rate, while the fact is that UI incurred on tripping of a unit cannot be compensated by over-generation even if there was no such cap. In fact, the petitioner is supposed to generate as per the schedule, and is not supposed to over-generate for effecting such compensation. Further, the loss incurred is not the total UI incurred, but is (UI incurred-capacity charge received – fuel cost saved). It would thus depend on the frequency at that time, and may only marginally increase because of application of the subject cap. The petitioner has not placed on record any real-time data to show that net UI payable to it has ever been on negative side. The petitioner might have been justified in raising the issue if it were paying out UI charges, which is not the case. Therefore, we are unable to accept the petitioner’s argument in this regard.”

9. At the hearing learned counsel for the petitioner submitted that the cap of 406 paise/kWh on UI rate applicable to the generating stations had created a dichotomy between the generation above the schedule and generation below the schedule and was thus discriminatory. He submitted that the generating company can generate up to 101% of its capacity and was therefore legitimately entitled to receive the price for sale of electricity paid by the beneficiaries under UI scheme. Learned counsel pointed out that when a generating station generates below the schedule it is required to pay the penalty up to the maximum rate of 1000 paise/kWh. However, when generation is above the schedule, price is capped at 406 paise/kWh. Learned counsel argued that it was not fair to deprive the petitioner of its legitimate dues arising out of the discharge of its statutory obligations. Learned counsel reiterated that if for any reason UI cap could not be dispensed with, it should not be made applicable to injection during the frequency from 49.2 Hz to 49.5 Hz, because, as per the provisions of the Grid Code the generating company is mandated to support the grid in such situations. Learned counsel further submitted that applying UI cap in case of TPS-I generating station

was totally unjustified as this was a vintage plant with small units of 50 MW to 100 MW and used lignite as fuel which has marcasite and other impurities affecting the generation. Therefore, he specifically sought special consideration for TPS-I generating station for application of UI cap rate of 406 paise/kWh, through exemption from UI cap rate. Learned counsel further submitted that the respondents could not have any grievance as they were not be required to pay anything more than what they were actually paying. He pointed out that the cap rate was not applicable to the generating stations embedded in the State system.

10. The representative of the first respondent, TNEB submitted that the Commission decided the price cap as the generating companies were drawing undue benefit by selling the power through UI and thus it was a case of unjust enrichment. He further submitted that the sample data produced by the petitioner in support of its claim of losses suffered as a result of introduction of UI cap, was not the representative data .

11. Learned counsel for the petitioner in its rejoinder submitted that the petitioner should not be penalized for optimum utilization of the funds sunk in by the Central Government in the petitioner company. He further emphasized that issue involved was not whether the petitioner was making profits but whether the price cap on UI was reasonable and not discriminatory to the generating companies, but the real issue was that the differential rates specified were discriminatory.

12. At the hearing, the representative of SRLDC submitted its feedback on the weekly UI data of NLC TPS-II Stages I and II and NLC TPS-I (Expansion) for the

period from 1.9.2008 to 1.3.2009. The submission of SRLDC was taken on record.

Analysis

13. We consider the matter in the light of the submissions made by the parties in their pleadings as also at the hearing.

14. The operations of coal-fired generating stations are much more stable in comparison to the generating stations using lignite as fuel. Therefore, the case of the twelfth respondent, which owns coal-fired/gas-fired generating stations, is not comparable with that of the present petitioner. Further the application made by the twelfth respondent stood decided in the order dated 23.6.2008 in Petition No. 17/2008.

15. We have given serious thought to the issues raised by the petitioner. The petitioner's case, as regards its TPS-I generating station, stands on different footing and there appears to be some merit in the petitioner's representation and arguments. UI rate cap (406 paise/kWh) was specified by the Commission for restricting undue profits being earned by the generating companies through generation above the schedule. It was not foreseen or expected that the generating company could suffer a loss on account of the cap, as seems to be the case of the petitioner because of the fluctuation of generation inherent in lignite-fired generating stations.

16. UI rate cap does result in an uneven treatment for generation variation/ fluctuation above and below the schedule. In any case, it was not the Commission's intention that the generating company should not get even the fuel

cost for net generation above the schedule, or it should suffer a loss due to inevitable operational fluctuations even when the generating station was operated without any intention of gaming for undue enrichment. It needs to be appreciated that TPS-I station is about 40-45 years old station. There has been deterioration in the quality lignite and there is no spare mill available. Any outage of a mill leads to reduction in generation. The Commission is inclined to address any genuine hardships and the genuine difficulties experienced by the petitioner need to be addressed.

17. In respect of TPS-I generating station, the position that emerges from the information furnished by the petitioner vide affidavit dated 9.4.2009 is as under:

	Month	UI energy (MU) (A)	UI amount (Rs. Lakh) (B)	aveg. UI rate (Rs.kWh) (B/A)
1	January,08 (from 7th day)	1.82	15.02	0.82
2	February, 08	2.10	-30.54	-1.46
3	March, 08	2.56	39.34	1.54
4	April, 08	2.61	19.11	0.73
5	May, 08	1.98	-13.18	-0.67
6	June, 08	1.31	-8.64	-0.66
7	July, 08	2.37	-14.53	-0.61
8	August, 08	2.25	-2.57	-0.11
9	September, 08	1.24	0.55	0.04
10	October, 08	1.52	-16.02	-1.05
11	November, 08	1.16	-2.81	-0.24
12	December, 08	1.46	9.07	0.62
13	January, 09	2.89	62.86	2.17
14	February, 09	2.98	76.93	2.58
15	March, 09 (upto 17th)	1.87	54.97	2.94
	Total	30.13	189.55	0.63
16	Energy rate (paise/kWh) as indicated by petitioner (C)		133.71	
17	Energy cost for UI generation (Rs. Lakh) (D=C*A)		402.83	
	Diffrence in UI amount and actual energy cost (Rs. Lakh)		-213.28	

18. It can be seen from the above that TPS-I generating station is losing around Rs. 213.28 lakh for the period 7.1.2008 to 17.3.2009 despite positive UI energy injection of 30.13 MU. During the period, average UI rate is worked out as Rs.0.63/kWh as against energy charge of Rs.1.34/kWh. However, in case of last three months (January to March 2009), the petitioner has not lost on account of UI.

19. Under the totality of the circumstances It is felt that the TPS-I generating station owned by the petitioner should be compensated for the lost energy charges on account of positive UI injection in the grid.

20. The regulations on payment of UI charges have been revised and the revised regulations have come into force with effect from 1.4.2009. In the new regulations there is reduction in UI ceiling prices and differential pricing has been done away in frequency band of 49.20 Hz to 50.30 Hz.

21. Under regulation 13 of the tariff regulations, 2004, the Commission has power to relax or vary any of the provisions thereof. Regulation 13 of the tariff regulations, 2004 is reproduced below:

“13. Power to Relax: The Commission, for reasons to be recorded in writing, may vary any of the provisions of these regulations on its own motion or on an application made before it by an interested person.”

22. In exercise of powers under regulation 13 ibid we grant one-time relaxation to compensate the petitioner on account of losses suffered by it on energy charges during the period 7.1.2008, when the amendment for UI cap rate came

into force to 31.3.2009, in case of TPS-I generating station. The petitioner may approach SLDC, Tamil Nadu for reimbursement of difference of actual energy cost on UI energy induction and UI amount received during 7.1.2008 to 31.3.2009 on consolidation basis from UI account as per the methodology adopted in the para 18 above, based on the energy charge rate allowed by the Commission and UI energy induction of the aforesaid period.

23. Since reimbursement on account of difference in actual energy cost on UI energy induction and UI received, to the petitioner only from UI account and there is no financial outfall on the first respondent, TNEB, the only beneficiary of TPS-I generating station.

24. In its order dated 23.6.2008 in Petition No. 17/2008, the Commission had categorically stated that it was open to address any genuine hardships resulting from the amendments after some experience is gained of its working. The above dispensation is in consonance with the same.

25. The issue of clubbing of different stages of the petitioner's thermal power generating stations had not been raised by the petitioner in the present proceedings, and we have refrained ourselves from going into it.

26. The petition stands disposed of in the above terms.

Sd/-
(V.S. VERMA)
MEMBER

Sd/-
(S. JAYARAMAN)
MEMBER

Sd/-
(R. KRISHNAMOORTHY)
MEMBER

Sd/-
(DR. PRAMOD DEO)
CHAIRPERSON

New Delhi, dated the 1st June, 2009