# Appellate Tribunal for Electricity (Appellate Jurisdiction)

## **Appeal No. 25 of 2008**

Dated: 7<sup>th</sup> April, 2011

Present: Hon'ble Mr. Justice M. Karpaga Vinayagam, Chairperson Hon'ble Mr. Rakesh Nath, Technical Member,

## In the matter of

Pragati Power Corporation
Limited (PPCL)
Himadri
Rejghat Power House Complex
New Delhi-110002

.....Appellant(s)

#### Versus

- 1. Delhi Electricity Regulatory Commission (DERC) Viniyamak Bhawan, C Block Shivalik, Malviya Nagar New Delhi-110007
- 2. Delhi Transco Ltd. Kotla Road, New Delhi-110002
- 3. BSES Rajdhani Power Ltd BSES Bhawan, Nehru Place New Delhi-110019

- 4. BSES Yamuna Power Ltd. Shakti Kiran Vihar Karkardooma Delhi-110092
- 5. North Delhi Power Ltd.
  Sub Station Building
  Hudson Lines, Kingsway Camp
  Delhi-110009

....Respondents

Counsel for Appellant(s): Mr. M.G. Ramachandran
Mr. Anand K. Ganesan
Ms Swapna Seshadri
Ms Sneha Venkataramani
Ms Ranjitha Ramachandran

Counsel for Respondent(s):Mr. R.K. Mehta

Mr. Lakhi Singh

Ms Poonam Verma

Ms Sakie Jakharia

Mr. Antaryami Upadhyay

Mr. S. Asthana

Mr. Amit Kapur

Mr. Anupam Varma

### **JUDGMENT**

## PER HON'BLE MR. JUSTICE M. KARPAGA VINAYAGAM, CHAIRPERSON

The Pragati Power Corporation Limited (PPCL),

New Delhi is the Appellant herein.

- 2. Challenging the impugned Order passed by the Delhi Electricity Regulatory commission (State Commission) dated 14th December, 2007, deciding on various aspects of determining the revenue requirements and tariff for the Appellant's generating station for the multi year period 2007-08 to 2010-11 and truing-up for the year 2006-07, the present Appeal has been filed by this Appellant.
- 3. The short facts are as follows:
  - (a) The Appellant is a generating Company owned and controlled by the Government of National Capital

Territory of Delhi. The Appellant generates and supplies electricity to the distribution licensees in Delhi. The Appellant has a combined cycle power project with installed capacity of 330 MW comprising of two Gas turbines each of 104 MW and one steam turbine of 122 MW.

- (b) On 10.8.2007, the Appellant filed its Annual Revenue Requirement petition being No.39 of 2007 before the State Commission for determination its Aggregate Revenue Requirement and generation tariff for the control period Financial Year 2007-08 to Financial Year 2010-11 and truing up of financial expenses for the period financial year 2006-07.
- (c) The State Commission admitted the Petition on 14.8.2007 and invited the objections and suggestions from the public. Ultimately, by order dated 14.12.2007, the State Commission decided the

Petition No.39 of 2007 determining the revenue requirement and Generation Tariff and also truing up of finances.

Feeling aggrieved by the decision of the State 4. Commission on certain aspects, the Appellant filed a review petition before the State Commission. In the meantime, the Appellant challenging the tariff order dated 22.09.2006 for the earlier period i.e. 2006-2007 passed by the State Commission filed Appeal No.82 of 2007 before Tribunal while the said Appeal was this pending impugned order dated 14.12.2007 was passed. The Tribunal disposed of the said Appeal on 10.1.2008 deciding similar issues raised in the case. Thereupon, the Appellant aggrieved over the order dated 14.12.2007 passed by the State Commission has filed this Appeal in Appeal No. 25 of 2008 in February, 2008.

- 5. Though several grounds have been raised in this Appeal at the time of filing this Appeal the Appellant, ultimately has restricted the present appeal only to the following issues:
  - (a) Station Heat Rate for the year 2007-08 to 2010-11.
  - (b) Operation and maintenance expenditure.
- 6. According to the Appellant, the State Commission ought to have considered the higher station heat rate to be achieved by the Appellant especially when the Appellant has been put to loss on account of various factors over which the Appellant does not have control.
- 7. With reference to operation & maintenance expenditure, it is submitted that the State Commission has not fully complied the provisions of the relevant regulations to determine the operation & maintenance

expenditure. It is also submitted that since the 6<sup>th</sup> Pay Commission's Recommendations have been implemented by the Appellant, the issue of operation and maintenance expenditure may be directed to be revisited and allowed at a higher level.

- 8. The Learned Counsel appearing for the State Commission in justification of the impugned order has submitted that the fixing of station heat rates as well as the operation and maintenance expenditure escalation was done only in pursuance of the relevant regulations and in the absence of the challenge to those Regulations, the points urged by the Appellant in this Appeal are not sustainable.
- 9. In the light of the above rival contentions, the following questions that may arise for consideration in the present appeal are:-

- (a) Whether the State Commission while determining the tariff of the Appellant on capital cost plus basis should allow higher station heat rates as the Appellant could not reach the norms for the reasons beyond the Control of the Appellant?
- (b) Whether the State Commission should have allowed Operation and Maintenance Expenditure escalation based on the financial year 2006-07?
- 10. In regard to the issue relating to station heat rate, it has been submitted by the Appellant, that the State Commission has not determined the station heat rate correctly, by taking into account the various ground realities. On the other hand, it is contended by the State Commission that the station heat rate parameters have been fixed in the Multi Year Tariff Regulations (MYT Regulations), 2007 and the Appellant having not challenged the said Regulations cannot be permitted to

challenge parameters based on these Regulations in this order.

- 11. State Commission has determined the The station heat rate of 2000 kcal/kWh in combined cycle mode and 2900 kcal/kWh for open cycle mode. The Gas Turbines are on 104 MW size. They were commissioned in the year 2002-03. According to the Appellant the design heat rate in simple cycle mode as certified by the manufacturer at rated output is 10660 KJ/Kwh (LCV) of compressor inlet temperature of 15 degree Centigrade and atmospheric pressure of 1.013 BAR. The guaranteed station heat rate at site conditions of 31.5 degree centigrade as certified by M/S. BHEL is approximately 2,693 kCal/kWh at LCV. The above is equivalent to 2986 kCal/kWh on GCV basis.
- 12. Taking into account the correction factor of 4% on the guaranteed heat rate as recommended by the

Central Electricity Authority, the corrected heat rate for simple cycle mode works out to 3105 kCal/kWh. In this context, it is to be taken into account that the Central Commission passed the Regulations (Central Electricity Regulatory Commission Terms and Conditions of Tariff Regulations 2009) presently gross heat rates for newly commissioned projects which provide for a correction of 5% over the designated heat rates.

13. In addition to above, it is stated that there have been severe gas cuts imposed by the gas supplier, namely, the GAIL and also frequent grid tripping which have adversely affected the station heat rate of the Appellant's generating station. According to the Appellant, all the above factors are beyond the control of the Appellant and Appellant can not be made liable or put to loss on account of the above situation.

- 14. The Appellant also pointed out that the issue has been considered and allowed by this Tribunal in favour of the Appellant in appeal No.82 of 2007 dated 10.1.2008. The relevant findings are given below:-
  - *"*5. The impugned tariff order says that the station heat rate is fixed as per the norm followed by CERC for similar Gas Turbine Stations. The appellant specifically pleads shortage of availability of gas at the relevant time. In the review petition also the petitioner The fact that at the relevant raised the same issue. time the Gas Authority of India Ltd. has been imposing cuts on gas supply has not been disputed. the tariff order nor the review order shows that this aspect was considered by the Commission. therefore, feel that the Commission needs to carry out the exercise of fixing station heat rate for the appellant afresh by taking into account the factor of shortage of gas for 2006-07. This be done and the consequent benefits be given to the appellant in the truing up exercise and the subsequent tariff orders".
- 15. In view of above Judgment of the Tribunal, the State Commission has to review the station heat rate of

the power station afresh for the FY 2006-07 for the purpose of true up of financials.

Now the question arises as to what treatment has to be given to the station heat rate determined for MYT tariff for FY 2007-08 to FY 2010-11 based on MYT Tariff Regulations?

16. According to the learned counsel for the State Commission the station heat rate parameters have been fixed in the Multi Year Tariff Regulations, 2007 which were not challenged. The 5% correction factor in the design heat rate introduced in the Central Commission's Regulations is in respect of 2009 Regulations which are applicable for the period 2009-14 and not for the Control Period 2007-08 to 2010-11. Opportunity was given to the Appellant to establish the extent of reduction on account of gas shortage and grid constraints but they were unable to establish the same from operational records.

- 17. We have noticed that the State Commission has determined the station heat rate based on the Central Commission's Regulations. The relevant para of the impugned order is extracted below:
  - "4.13. The Pragati Power Station is a five year old station, and hence, can be operated optimally to meet the targets set for the norms of operation. The Commission notes that CERC has provided for SHR of 2000 kCal/kWh (combined cycle operations) and 2900 kCal/kWh (open cycle operations) to the Kayamkulam Combined Cycle Power Project and Faridabad GTPS, which were commissioned in 1999 and are very close in technical specifications to Pragati Power Station. CERC has set same SHR for NTPC Gandhar GTPS, which was set up in 1994-95.

- The Petitioner has reasoned for higher heat rate on the basis of technical problems in the plant and irregularities in fuel supply. Since the performance of the plant and fuel supply arrangements are part of the regular business (generation) of the Petitioner, the Commission expects the Petitioner to be best suited to mitigate any associated risks due to problems in fuel supply or breakdowns in the plant, except due to force majuere events. The Petitioner in his submission has also proposed to achieve a PLF of 83% for the Control Period which will contribute to improvement in the SHR of the Plant.
- 4.15 Hence, the Commission shall consider the norms specified in MYT Regulations for determination of tariffs for PPCL during the Control Period.

**Table 4.2: Station Heat Rate** 

(SHR in kCal/kWh)	Proposed			Approved				
	FY 08	FY 09	FY 10	FY 11	FY08	FY 09	FY10	FY 11
Combined Cycle	2050	2050	2050	2050	2000	2000	2000	2000
Open Cycle	3150	3150	3150	3150	2900	2900	2900	2900

18. The State Commission has also recorded the following with regard to station heat rate for the Appellant's plant in its review order dated 20.7.2009 on the petition filed by the Appellant for review of the impugned order dated 14.12.2007:

"As a matter of fact, as per advice of the Commission, the Petitioner has diverted the supply of gas from Gas Turbine Power Station of IPGCL to Pragati Power Station resulting in better PLANT LOAD FACTOR of the plant and consequential improvement in Station Heat

Rate. The fixed cost for IPGCL Gas Turbine Power Station is being paid even though the gas is diverted to the Pragati Power Station. Two of the gas turbines in IP Gas turbine power station were allowed to be modified to operate on dual fuel. Both the Conversion Charges for dual fuel operation and higher variable charges on account of liquid fuel are being allowed. With such enabling provisions regarding use of alternative fuels, non availability of gas should not be an issue for any relaxation of Station Heat Rate".

19. The learned counsel for the Appellant has argued that the State Commission under the Regulations framed has been vested with the power to relax and amend the Regulations after having taken into consideration the circumstances of the case. The learned counsel for the Appellant in support of his arguments has cited the decisions rendered by this Tribunal in NTPC Ltd. vs. Madhya Pradesh State Electricity Board and Others, 2007

APTEL 7 and M.P. Trading Company Ltd. vs. Torrent Power Ltd. & Ors. 2009 ELR (APTEL) 124 referring to the various circumstances under which the State Commission can exercise power to relax.

20. Let us first examine the circumstances under which the State Commission can exercise its power to relax. In this context, we reproduce the relevant findings of this Tribunal in its Judgment in Appeal No. 130 of 2009, Ratnagiri Gas and Power Private Ltd. vs. CERC & Ors.

"10.7. The above Regulations and the decision give the judicial discretion to the Central Commission to relax norms based on the circumstances of the case. However, such a case has to be one of those exceptions to the general rule. There has to be sufficient reason to justify relaxation. It has to be exercised only in exceptional case and where non-

exercise of the discretion would cause hardship and injustice to a party or would lead to unjust result. In the case of relaxation of the Regulations the reasons have to be recorded in writing. Further, it has to be established by the party that the circumstances are not created due to act of omission or commission attributable to the party claiming the relaxation.

In light of the above principles let us examine if 21. the circumstances in the present case would justify exercise of power to relax by the State Commission. The also argued that learned counsel has the State Commission has power to amend its Regulations. We do not want to go into the question of amendment of the regulations as firstly, the MYT Regulations are not under secondly, this challenge Tribunal is and not the appropriate forum to challenge the Regulations.

We notice that the assertions of the Appellant 22. regarding effect on heat rate due to shortage of gas and grid constraints are of general nature without any supporting data. The Appellant could not produce any documents to establish its claim for the circumstances for the State Commission to exercise its power to relax the normative parameters for station heat rate under the MYT The Appellant furnished some data sheet Regulations. for the gas turbine station submitted by the suppliers in support of its claim for station heat rate. However, the date sheet indicates the degraded guaranteed heat rate based on degradation factor of 4% for Pragati Power Station of the Appellant as 1978.08 *kCal/kWh* in combined cycle mode which is the normal mode of operation. The station heat rate allowed in the impugned order is 2000 kCal/kWh which is more than that indicated in the data sheets.

- 23. On the other hand, the State Commission has passed a reasoned order for adoption of the norms based on the Central Commission's Regulations, its own MYT tariff regulations and has also given directions for diversion of gas from IPGCL Gas Turbine Station, where two Gas turbines were allowed to be modified to operate on dual fuel, to Pragati Power Station of the Appellant to meet the gas shortage.
- 24. In view of above, we do not find any substance in the contentions of the Appellant regarding Station Heat Rate for the MYT Control Period.
- 25. The next issue is relating to operation and maintenance expenditure. On this issue, the State Commission has restricted the claim of the Appellant for operation and maintenance expenditure based on the average of the normative operation and maintenance expenditure allowed for the year 2005-06 and 2006-2007 with an escalation of 4%. It is noticed from the tariff

regulation that the actual expenditure incurred in the previous orders and the projection of the multi year period ought to be taken into account. The relevant Regulation is 6.30 of the Regulation which is as follows:

"6.30 Existing Generating Station: The Applicant shall submit details on O&M expenses as required by the Commission. The O&M expenses for the Base Year shall be determined based on the latest audited accounts/actual, estimates of the Generating Company for the relevant years and other factors considered relevant".

26. On going through the Regulations, we feel that the State Commission has not correctly applied the above Regulations to determine the operation and maintenance expenditure for the multi year period 2007-2008 to 2010-2011. As pointed out by the Appellant, the State Commission in its order passed in Review Petition dated 20.7.2009, has agreed to correct the escalation factor applied considering the years 2005-06 and 2006-07 and corresponding escalation factor to be applied for each of

the years in terms of the Regulations. Accordingly, the State Commission may consider the same and pass an appropriate order with reference to the issue.

- 27. With regard to 6<sup>th</sup> Pay Commission recommendation, the Learned Counsel for the State Commission has submitted the recommendations as per the Pay Commission will be given effect to on actual basis and same will be considered for being allowed as soon as possible.
- 28. In view of the above submissions made by the Learned Counsel for the State Commission, we direct the State Commission to pass necessary orders after hearing the parties. This issue is answered accordingly.
- 29. In view of the above findings, we allow the Appeal partly and set aside the order impugned on the issue of operation and maintenance expenditure and

remand the matter to consider and decide the issue referred to above afresh in the light of the above findings and also on the basis of the materials placed by the parties concerned.

30. With these observations, the Appeal is partly allowed.

(Rakesh Nath)
Technical Member

(Justice M. Karpaga Vinayagam) Chairperson

Dated: 7th April, 2011

REPORTABLE/NON-REPORTABALE

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