

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

1. **Shri Ashok Basu, Chairman**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N. Sinha, Member**

**Review Petition No. 136/2003  
in  
Petition No. 56/2002**

**In the matter of**

Fixation of operational norms for small gas turbine power stations

**And in the matter of**

Assam State Electricity Board

... **Petitioner**

**Vs**

1. North Eastern Electric Power Corp. Ltd., Shillong
2. Meghalaya State Electricity Board, Shillong
3. Department of Power, Govt. of Tripura, Tripura
4. Govt. of Arunachal Pradesh, Itanagar
5. Electricity Department, Govt. of Manipur, Imphal
6. Power & Electricity Department, Mizoram
7. Department of Power, Govt. of Nagaland, Kohima .....

**Respondents**

**The following were present:**

1. Shri D.N. Deka, ASEB
2. Shri Parag P. Tripathi, Sr. Advocate, NEEPCO
3. Shri Sudhir Mishra, Advocate, NEEPCO
4. Shri A. Hossain, NEEPCO
5. Ms. D. Dey, NEEPCO

**ORDER  
(DATE OF HEARING : 29.4.2003)**

The petitioner, Assam State Electricity Board has filed this application for review of order dated 25.9.2002 in Petition No. 56/2002.

2. The Commission vide its order dated 25.9.2002 in Petition No. 56/2002 had decided the operational norms for small gas turbine power stations, with a capacity of 50 MW or less, which include Assam Gas Based Power Project (for short, AGBPP) and Agartala Gas Turbine Power Project (for short AGTPP) belonging to the first respondent. The petitioner is aggrieved on account of fixation of the Station Heat Rate norms in respect of AGBPP and AGTPP. The relevant facts in this regard are discussed in the succeeding paragraphs.

3. The Commission in its order dated 25.9.2002 had decided the Station Heat Rate norms for small gas turbine power stations of capacity 50 MW and less as under:

Station	Station Heat Rate in Kcal/kWh	
	Open Cycle operation	Combined Cycle operation
Assam Gas Based Power Project (AGBPP)	3225	2250
Agartala Gas Turbine Power Project (AGTPP)	3580	-
Generating Stations, other than AGBPP and AGTPP	3125	2030

4. The petitioner, Assam State Electricity Board feels aggrieved on account of higher level of Station Heat Rate norms decided by the Commission for AGBPP and AGTPP, as compared to other stations up to the capacity of 50 MW or less. The petitioner raised a number of issues in the application for review of the Commission's direction in regard to fixation of Station Heat Rate norms for

AGBPP and AGTPP. We had heard the representative of the petitioner on 14.2.2003. After hearing, the application for review was, however, admitted on only one ground. It was urged that the first respondent had filed petitions before the Commission for approval of tariff in respect of AGBPP and AGTPP which were based on Station Heat Rate norms of 2900 Kcal/kWh and 2000 Kcal/kWh respectively for Open Cycle Operation and Combined Cycle Operation contained in Ministry of Power notification dated 30.3.1992. It was also stated that the first respondent was charging provisional single part tariff @ 190 paisa/kWh and 225 paisa/kWh for the power sold from these two stations, and this tariff was also arrived at based on norms contained in Ministry of Power notification dated 30.3.1992. Under these circumstances, a question arose whether the first respondent could be allowed more liberal Station Heat Rate norms. The application for review was admitted limited to this ground only for which notice was sent to the respondents. Only the first respondent has responded to the notice and has filed its reply.

5. We heard Shri D.N Deka on behalf of the petitioner and Shri Parag P. Tripathy, Senior Advocate assisted by Shri Sudhir Mishra, Advocate on behalf of the first respondent. It was urged on behalf of the petitioner that first respondent could not be permitted higher Station Heat Rate norms, when its own proposals for tariff were based on Ministry of Power's notification dated 30.3.1992. The contention raised on behalf of the petitioner was opposed by Shri Parag P. Tripathy, learned Senior Counsel.

6. Petition No. 5/2000 was filed by the first respondent for approval of two part tariff in respect of AGTPP for the years 1998-99 and 1999-2000. Similarly, in Petition No. 6/2000, the first respondent had prayed for approval of two part tariff for the years 1998-99 and 1999-2000 in respect of AGBPP. Subsequently, these petitions were amended and as a consequence of these amendments, the petitioner sought approval of the Commission for tariff for the year 2000-2001 also, in addition to the years 1998-99 and 1999-2000. It has been explained by learned Senior Counsel appearing for the first respondent that when provisional tariff was agreed to at NEREB forum or petitions for approval of tariff were filed in the year 2000, there were no Station Heat Rate norms or guidelines, except those contained in Ministry of Power notification dated 30.3.1992. Therefore, Station Heat Rate norms as per the said notification dated 30.3.1992 were considered for these two stations even though it was not possible to achieve these norms under any circumstances. It is further submitted that the Commission in its order dated 21.12.2000 in Petition No. 4/2000 and other related petitions had directed the first respondent to file an appropriate petition for fixation of norms for small gas turbine based power stations being operated in North-Eastern Region. The first respondent filed Petition No. 50/2001 in compliance with the Commission's above direction. Learned Senior Counsel submitted that during pendency of Petition No. 50/2001, the Commission circulated a paper prepared by its staff on operational norms, which was registered as Petition No. 56/2002, among different stakeholders to elicit their views and suggestions on the issues raised therein. The stakeholders were afforded opportunity for personal hearing, which was

availed of by the petitioner. After hearing all concerned, the Commission vide its order dated 25.9.2002 decided the Station Heat Rate norms sought to be reviewed. Under these circumstances, according to the first respondent, the application for review petition is not maintainable.

7. We have considered the submissions made on behalf of the parties. There is no denial of the fact that the provisional tariff of 190 paisa/kWh and 225 paisa/kWh charged by the first respondent was based on Station Heat Rate norms as contained in Ministry of Power notification dated 30.3.1992. Similarly, the proposal for approval of tariff in Petitions No. 5/2000 and 6/2000 were based on Station Heat Rate norms contained in that notification. However, as there were no other guidelines available for basing the proposal for Station Heat Rate norms, the Commission while considering the operational norms, which includes Station Heat Rate, felt that the general norms prescribed under Ministry of Power notification dated 30.3.1992 could not be applied to small gas turbine based power stations belonging to the first respondent. Accordingly, the Commission in its order dated 21.12.2000 directed the first respondent to file an appropriate petition supported by necessary data for finalisation of operational norms applicable to such stations. The first respondent agreeing to provisional tariff of 190 paisa/kWh and 225 paisa/kWh based on Station Heat Rate norms contained in Ministry of Power notification dated 30.3.1992 or its subsequent filing of petitions No. 5/2000 and 6/2000 for approval of tariff is of no consequence so far as application of Station Heat Rate norms are concerned.

8. In Petition No. 50/2001 filed by the first respondent in compliance with the direction of the Commission, it had prayed for approval of following Station Heat Rate norms:

**For Open Cycle Power Stations**

3370 Kcal/kWhr	-	at 100% Plant Load Factor
3513 Kcal/kWhr	-	at 80% Plant Load Factor and,
3743 Kcal/kWhr	-	at 60% Plant Load Factor

**For Combined Cycle Power Stations**

3000 KCal/Unit	-	at 40% PLF
2830 Kcal/Unit	-	at 50% PLF
2725 Kcal/Unit	-	at 60% PLF
2650 Kcal/Unit	-	at 65% PLF
2203 Kcal/Unit	-	at 80% PLF
2167 Kcal/Unit	-	at 100% LF

9. In the reply filed by the petitioner, it was stated that gross Station Heat Rate norms were already fixed by Ministry of Power on the recommendation of CEA and any deviation from those norms would necessitate review in its entire gamut for which a decision was left to be taken by the Commission. We reproduce the relevant portion of the reply filed on behalf of the petitioner:

**“GROSS STATION HEAT RATE FOR GAS BASED STATIONS:**

Govt. of India has already fixed norms with limiting, parameters on such counts considering all aspects by recommendation of competent authority like CEA. Any deviation from these norms will necessitate review in its entire gamut. The Hon'ble Commission may look into the matter and take decision accordingly .“

10. The perusal of the reply reveals that petitioner had not made any serious issue on the Station Heat Rate norms claimed by the petitioner and left the decision to be taken by the Commission.

11. In the staff paper circulated as Petition No. 56/2002 (Suo motu), the Station Heat Rate norms recommended were contained in Para 2.17 which is reproduced below:

“2.17 Based on the discussions in the above paragraphs, the following Heat rate norms for the Open Cycle Operation and Combined cycle operations are specified for the smaller gas turbine plants of 50 MW and below with Natural gas as the fuel:

Open Cycle Operation	3225 KCal/kWh
Combined Cycle Operation	2250 Kcal/kWh

For liquid fuel based plants a multiplying factor of 1.02 is proposed to be used.

In case of Agartala GBP of NEEPCO having frame-5 machines whose guaranteed heat rate is more than heat rate specified above, an open cycle heat rate of 3580 Kcal/kWh is allowed

The above values have been derived considering annual PLF of 65% and above for which Units/Blocks would be running at more than 80% loading”.

12. An affidavit in reply to petition No.56/2002 (Suo Motu) was also filed on behalf of the petitioner. In the said reply it was stated that “in case of Agatala GBP

the rationality behind selection of high heat rate should be ascertained prior to any decision that will put additional cost to the beneficiary state as well as the ultimate users". This itself reveals that the petitioner had not expressed any serious reservations on the issue, but the decision was left to the Commission. The Commission after considering the totality of the facts and circumstances and through a reasoned order decided the Station Heat Rate norms applicable to AGBPP, AGTPP and other stations. Under these circumstances, in our opinion, the petitioner cannot contest or seek review of the decision arrived at through the consultative process as it cannot be said to be falling under any of the parameters prescribed for review of order under Section 114 read with Order 47 of the Code of Civil Procedure.

13. In Petitions No. 5/2000 and 6/2000, as amended, the petitioner had sought approval of tariff based on operational norms contained in Ministry of Power notification 30.3.1992 for the period from 1998-99 to 2000-2001. However, the norms decided by the Commission in Petition No. 56/2002 have come into force with effect from 1.4.2003. For the period up to 31.3.2003, the old norms as contained in Ministry of Power notification dated 30.3.1992, have been applied and the Commission has already approved tariff based on those norms. The first respondent cannot be permanently estopped from claiming higher Station Heat Rate norms in the light of practical experience of operation of the power stations in question. For this reason also, the application for review is not maintainable.



14. It has been stated on behalf of the petitioner that machines for these two stations were required to be selected and operated as per the norms contained in Ministry of Power Notification dated 30.3.1992 and its subsequent modifications. It is further averred that the first respondent had not taken note of norms stipulated in the notification dated 30.3.1992 while selecting the machines for these two stations and its failure to purchase machines compatible to the requirements contained in the said notification should not be a reason for passing on the burden to the beneficiaries in the shape of more liberal Station Heat Rate norms. The first respondent has clarified that the sole criterion for selection of size of the gas turbines stations was the transportation bottlenecks in North-Eastern Region. It is further stated that in case size of the gas turbines were to be selected so as to conform to the prescribed Station Heat Rate norms, these two projects would not have taken off at all as it would have been impossible to carry turbines of higher capacity due to transportation bottlenecks. It has also been stated that the plants cannot be operated at the station heat rate norms contained in the Ministry of Power notification dated 30.3.1992.

15. We have considered the rival submissions in this regard. We accept the contention raised on behalf of the first respondent that in view of practical difficulties in achieving the lower Station Heat Rate norms, the project may become totally unviable if they are not allowed technically feasible and appropriate Heat Rate Norms. In such a situation, the constituents of North Eastern Region might be deprived of power. Although this is not a specific issue

before us on which application for review was admitted, we have considered this aspect and on consideration, the need for prescription of suitable Station Heat Rate norms for AGBPP and AGTPP gets reinforced and justified.

16. In the light of the aforesaid, there is no error, much less an error apparent on the face of record, necessitating review of order. The review petition is not maintainable and is accordingly dismissed, with no order as to costs.

**Sd/-**  
**(K.N. SHINA)**  
**MEMBER**

**Sd/-**  
**(G.S. RAJAMANI)**  
**MEMBER**

**Sd/-**  
**(ASHOK BASU)**  
**CHAIRMAN**

New Delhi dated the 7<sup>th</sup> May, 2003