

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Miscellaneous Petition No.133/2011

**Coram: 1. Shri S.Jayaraman, Member
2. Shri V.S.Verma, Member
3. Shri M.Deena Dayalan, Member**

Date of Hearing: 15.12.2011

Date of Order: 7.6.2012

In the matter of

Relaxation of Heat Rate norms of Assam Gas Based Power Project and Agartala Gas Turbine Project, under Regulation 44 of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2009.

AND

In the matter of

North Eastern Electric Power Corporation Ltd, New Delhi
Vs

.... **Petitioner**

1. Assam Power Distribution Company Ltd, Guwahati
2. Meghalaya Energy Corporation Ltd, Shillong
3. Tripura State Electricity Corporation Ltd, Agartala
4. Power & Electricity Department, Government of Mizoram, Aizwal
5. Electricity Department, Government of Manipur, Imphal
6. Department of Power, Government of Arunachal Pradesh, Itanagar
7. Department of Power, Government of Nagaland, Kohima
8. North Eastern Regional Power Committee, Shillong
9. North Eastern Regional Load Despatch Centre, Shillong

...**Respondents**

Present:

1. Shri M.G.Ramachandran, Advocate, NEEPCO
2. Ms. Swapna Seshadri, Advocate, NEEPCO
3. Shri Pradeep Kumar Singha, NEEPCO
4. Shri N.Chakraborty, NEEPCO
5. Shri A.N.Dev Choudhary, APDCL
6. Shri K.Goswami, APDCL
7. Shri Subhas Chakraborty, TSECL



ORDER

The petitioner, North Eastern Electric Power Corporation Ltd (NEEPCO), has filed this application praying for the following reliefs:

- (a) *To review the Heat Rate norms prescribed by it for the Assam Gas Based Power Project and the Agartala Gas Turbine Project of NEEPCO;*
- (b) *To relax the Heat Rate norms suitably with retrospective effect from 1.4.2009, so that the landed cost of fuel may be fully recovered from the beneficiaries;*
- (c) *To allow the recovery of the landed cost of fuel from the beneficiaries based on the relaxed Heat Rate norms with retrospective effect from the beginning of the current tariff period, that is, with effect from 1.4.2009;*

Background

2. Assam Gas Based Power Project (291 MW) and Agartala Gas Turbine Project (4x21 MW) (hereinafter referred to as 'the generating stations') are owned by the petitioner and the said generating stations have been commissioned on 1.4.1999 and 1.8.1998 respectively. The tariff of the generating stations are determined by the Commission in terms of Section 79(1)(a) read with Section 62(1)(a) of the of the Electricity Act, 2003.

3. On 26.3.2009, the Commission notified the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations') applicable for the period 2009-14 and in terms of Regulation 26(ii)(e) of the 2009 Tariff Regulations, the normative Gross Station Heat Rate (GSHR) in respect of the generating stations are as under :

	Combined Cycle (kCal/kWh)	Open Cycle (kCal/kWh)
Assam Gas Based Power Project (AGBPP)	2400	3440
Agartala Gas Turbine Power Project (AGTPP)	-	3500

4. The petitioner, in support of its prayer in the petition, has submitted as under:



(a) The fuel gas to AGBPP and AGTPP is being supplied by M/s Oil India Ltd and M/s GAIL respectively. The landed cost of fuel gas comprising price of fuel gas and transportation charge is recoverable from the beneficiaries based on the Normative GSHR and the normative Station Auxiliary Consumption as specified under the 2009 Tariff Regulations.

(b) It has been found that the landed cost of fuel gas has not been recovered fully under the recovery mechanism prescribed by the Commission for these generating stations and the accumulated under recovery during the year 2009-10 was ₹12.78 crore and the situation worsened during 2010-11 with an under recovery of ₹30.11 crore. Thus, the total under recovery during the period from 1.4.2009 to 31.3.2011 is ₹42.89 crore, for the said generating stations.

(c) On investigation into the matter, it was found that there was some inherent problem in the fuel cost recovery methodology, more specifically in the normative Gross Station Heat Rates prescribed by the Commission in the 2009 Tariff Regulations, because of an inadvertent mistake on the part of the petitioner, while submitting the operational data to the Commission by letter dated 29.4.2008, in response to the public notice of the Commission for finalization of the 2009 Tariff Regulations for the period 2009-14. In the said submission, as required under Annexure-II the 'Weighted Average Net Calorific Value of fuel' was furnished as the 'Weighted Average Gross Calorific Value of fuel' by mistake. The Weighted Average Gross Calorific Value of fuel in respect of the generating stations, as submitted by the petitioner to the Commission, by its letter referred above, are as under:

	(kCal/SCM)				
	2002-03	2003-04	2004-05	2005-06	2006-07
AGBPP	8391	8377	8248	8132	8160
AGTPP	8237.75	8247.108	8244.755	8251.96	8262.81

(d) Consequently, the Heat Rates, as computed and submitted before the Commission vide petitioner's letter dated 30.5.2008 was taken as the Gross Heat Rates due to the aforesaid mistake in considering the Net Calorific Value (NCV) as the Gross Calorific Value (GCV) of the fuel. The Heat Rate data submitted in the letter dated 30.5.2008 is as under:



Assam Gas Based Power Project (AGBPP)

	Gas Consumption	Actual generation (MU)	Gross Calorific Value (kCal/Scm)	Heat Rate (kCal/kWh)
2003-04	442429926	1591.4506	8377	2328.84
2004-05	474237217	1618.1036	8248	2417.34
2005-06	492149551	1723.6353	8132	2321.93
2006-07	525748836	1805.3608	8160	2376.32
2007-08	500716751	1727.344	8278	2399.60
Average Heat Rate				2368.81

(e) Accordingly, the Commission on 19.1.2009 notified the normative Gross Station Heat Rates for the generating stations under Regulation 26(ii)(e) of 'the 2009 Tariff Regulations (as shown in the table under para 2 of this order).

(f) However, the actual Average Gross Heat Rates, that is, the Heat Rates based on GCV as achieved by these generating stations during the years 2009-10 and 2010-11 are as hereunder:

	Total Gas Consumption during the year (SCM)	Actual generation during the year (kWh)	Average Net Calorific Value (kCal/SCM)	Average Gross Calorific Value (kCal/SCM)	Actual Average Heat Rate based on NCV (kCal/kWh)	Actual Average Heat Rate based on GCV (kCal/kWh)
AGBPP						
2009-10	483464238	1749620000	8376.167	9281.867	2316.148	2566.620
2010-11	524127700	1835468200	8425.00	9360.05	2426.580	2695.390
AGTPP						
2009-10	271627172	662560000	8260.806	9164.454	3386.930	3757.419
2010-11	263876529	643988000	8256.510	9161.121	3390.00	3761.00

(g) The Heat Rates and other operational norms under the 2009 Tariff Regulations were decided based on the operational parameters achieved by different generating stations during the previous five years from 2003-04 to 2007-08. The said mistake in the submission of operational parameters, particularly, furnishing the 'Weighted Net Calorific Value of fuel' as the 'Weighted Gross Calorific Value of fuel' had led to the Commission specifying the 'Net Heat Rates' as the 'Gross Heat Rates' for these generating stations under Regulation 26(ii)(e) of 'the 2009 Tariff Regulations. As a result of this, there has been huge under recovery of the landed cost of fuel even though these generating stations have been achieving Station Heat Rates better than/comparable with those achieved during the tariff period 2004-09.

(h) The petitioner may not be penalized for the inadvertent mistake on its part in submitting the Weighted Net Calorific Value of fuel as the 'Weighted Gross Calorific Value of fuel. If the Weighted Average Gross Calorific Value of the fuel was given correctly, the normative Station Heat Rate allowed for the purpose of recovery of the cost of fuel would have been based on the Gross Calorific Value of the fuel (*shown in the table under sub para (f) above*) and there would not have been under recovery of the cost of fuel. The cost of fuel is beyond the control of the petitioner and the petitioner recovers only the actual outflow on normative basis.

5. During the hearing, the learned counsel for the petitioner submitted that the petitioner is not challenging the principle or the methodology contained in the 2009 Tariff Regulations, but is only seeking the correction of the inadvertent mistake which had crept in while submitting the details of GCV of the fuel. He also submitted that in view of the reasons mentioned aforesaid, the Commission in exercise of its powers under 2009 Tariff Regulations, may correct the anomaly in the calculation of the normative Station Heat Rate and prayed that the normative Gross Station Heat Rates (GSHR) specified under Regulation 26(ii)(e) of the 2009 Tariff Regulations be accordingly changed with retrospective effect from 1.4.2009, so as to enable the petitioner to receive the actual cost of fuel, in respect of these generating stations.

Submission of the respondents

6. The respondent No1, APDCL has submitted as under:

(i) The gas based generating stations of the petitioner have been allowed the highest Station Heat Rate in the country and this step does not encourage competition, efficiency, economical use of resources, good performance and optimum investment as defined under Section 61(c) of the Electricity Act, 2003 (the Act).

(ii) The under recovery of cost may be either due to idle running of the turbine without energy generation due to maintenance operation of the generator or open cycle operation of any or all

units of the combined Assam gas based plant from time to time and the inherent problems of gas booster of AGBPP is well known.

(iii) The landed cost of fuel is the sum total cost of fuel gas and transportation charge whereas the actual cost of fuel recovered is the product of Energy Charge Rate (ECR) and energy generated. The under recovery may be due to factors like malfunctioning of the gas station meter for measurement of volume of gas or else attributable to gas supplier also. The petitioner may be directed to reconcile the gas billing accounts with the supplier and ascertain the real cause of under recovery,

(iv) All the generating stations have submitted information and the Commission had accepted the norms after prudence check of the information. The Commission has allowed higher Station Heat Rates for generating stations owned by the petitioner in comparison to those owned by other agencies. The under recovery of cost may be due to inefficiency or bad performance of the petitioner.

(v) The petitioner cannot and should not expect that whatever data it had submitted must be accepted by the Commission in formulating the Regulations. The finalization of provisions of such Regulations is the sole prerogative of the Commission and in doing so is guided by the provisions of Tariff Regulations enumerated in Section 61 of the Act. The under recovery may be due to other factors as stated and the beneficiaries should not be made to pay for the inefficiencies and poor performance of the generator.

(vi) The Commission may not review and alter the provisions of the regulations as prayed for by the petitioner. The normative Heat Rates prescribed by the Commission is almost the average of the Heat Rates based on NCV and GCV of gas, with little margin to encourage competition, efficient operation and optimum utilization of resources.



7. During the hearing, the representative of the respondent, APDCL reiterated the above submissions and stated that the petitioner's prayer for relaxed norms, if accepted, without ascertaining the actual reasons, would be against the philosophy of rewarding efficiency and penalizing inefficiency. Accordingly, the representative of the respondent prayed that the petition may not be admitted.

8. The respondent No.3, TSECL has submitted as under:

(i) The under recovery in landed cost of fuel gas supplied to the generating stations only due to the Gross Station Heat Rate norms specified by the Commission is not maintainable. The submission of Weighted Average Net Calorific Values in place of the Weighted Average Gross Calorific Values by the petitioner has no effect in specifying the Gross Station Heat Rates for the generating stations by the Commission while notifying the 2009 Tariff Regulations. The apprehension of the petitioner has also not been reflected in the Gross Calorific Value allowed in the tariff orders approved by the Commission for the period 2009-14 for the generating stations of the petitioner.

(ii) The Gross Heat Rate as allowed under Regulation 26(ii)(e) of the 2009 Tariff Regulations are relaxed norms for the generating stations of the petitioner corresponding to manufacturers' guaranteed Heat Rates.

(iii) The calculation adopted by the petitioner in deriving the Gross Heat Rate is in contravention of the 2009 Tariff Regulations and hence the petition is not maintainable as the electrical energy generated in a GT unit depends on the efficiency of the turbine, extent of utilization of heat energy in the process and loading parameters.

(iv) This respondent has been operating GTs in open cycle mode [4 nos of 21 MW capacity] and the GSHR achieved by the units during 2009-10 & 2010-11 are 3450 kCal/kWh & 3470 kCal/kWh respectively.



9. During the hearing, the representative of the respondent, TSECL reiterated the above submissions and prayed that the petition may be rejected.

10. Heard the parties. The submissions of the parties along with the documents available on record have been examined and the prayer of the petitioner has been considered as discussed in the subsequent paragraphs.

11. The petitioner, in this petition has sought the relaxation of Gross Station Heat Rate norms specified by the Commission in Regulation 26(e)(ii) of the 2009 Tariff Regulations for these generating stations, on the ground that the actual Heat Rate values furnished by letter dated 29.4.2008 to the Commission for the period 2004-05 to 2007-08 were based on NCV of fuel instead of GCV of fuel. This, according to the petitioner, was an inadvertent mistake on its part, which has resulted in huge under recovery of the landed cost of fuel.

12. The operational norms allowed by the Commission for the first time in case of existing generating stations of NTPC Ltd and NLC, were as per project specific tariff notification issued by the Central Government and in cases where no notification was issued, the operational norms as per Power Purchase Agreements (PPA) entered into between the parties were adopted. However, in respect of the generating stations of the petitioner, neither any project specific tariff notification was issued by the Central Government nor any PPAs were entered into by the parties. In view of this, the norms for Station Heat Rate in respect of the generating stations of the petitioner were specified by the Commission based on guaranteed values given by manufacturer at site conditions with a degradation factor over and above the guaranteed values, as submitted by the petitioner. The specified norms were based on GCV of fuel in line with the Heat Rate norms of NTPC generating stations, specified on the basis of GCV of fuel in the 2001 Tariff Regulations, notified by the Commission for the period 2001-04.



13. While so, for the first time, the Commission by its order dated 25.9.2002 in Petition No.56/2002 (*suo motu*) specified the operational norms for small Gas Turbines, including the generating stations (AGBPP and AGTPP) of the petitioner. Prior to this, staff paper was also circulated inviting comments from stakeholders and in response, the petitioner vide its affidavit dated 13.5.2002 had submitted that the operational norms specified were acceptable to it, except for Target Availability and Target PLF.

14. As stated, the Station Heat Rates norms specified by the Commission for the first time were based on manufacture guaranteed Heat Rate values at site ambient conditions, as furnished by the petitioner. The parameter considered by the manufacturer for such guaranteed values at site ambient conditions, such as on GCV or NCV of fuel, were not furnished by the petitioner at the time of specifying the Heat Rate norms for the first time in 2002. The Commission by its letter dated 6.9.2011 directed the petitioner to submit the following information:

- (a) *The manufacturer's design guaranteed Heat Rate of the station at 100% MCR capacity and the parameters considered for guaranteed Heat Rate such as on GCV or NCV basis, site ambient conditions etc.*
- (b) *The manufacturer correction curve for variation in Heat Rate with ambient conditions, variation in Heat Rate with unit loadings, variation in which Heat Rate with aging of machines etc.*
- (c) *The sampling point of Calorific Value of gas and the report of analysis of gas quality (two samples) at the sampling point with the information that who takes the sample and the place the sample is tested.*
- (d) *The gas supply/consumption, its calorific value and gross generation and net generation on monthly basis for the year 2009-10 & 2010-11.*

15. In compliance with the above, the petitioner vide its affidavit dated 29.9.2011 has submitted the design guaranteed Heat Rate at 100% MCR capacity, the site ambient conditions, the manufacturers correction curve., the sampling point, the report of analysis of gas quality at sampling point, the gas supply/consumption and its calorific value, gross and net generation on monthly basis for the years 2009-10 and 2010-11 along with supporting documents. The



petitioner has also submitted that the guaranteed Heat Rate values by manufacturers are based on NCV of fuel, which could be justified from the documentary evidence enclosed by it.

Agartala Gas Turbine Power Project (AGTPP)

16. It is observed from the performance of GE manufactured Gas Turbine Model PG 5371 (PA) submitted by the petitioner vide affidavit dated 29.9.2011, that the estimated design Heat Rate based on NCV of fuel and at ISO conditions i.e at 15⁰C ambient temperature is 3021.98 kCal/kWh. The design Heat Rate based on NCV of fuel corresponding to site ambient temperature at AGTPP, taking in to account the correction factor due to ambient temperature of 40⁰ C works out to 3234 kCal/kWh. The guaranteed design Heat Rate at 100% MCR capacity at site ambient conditions based on NCV of fuel is 3337 kCal/kWh and the guaranteed Heat Rate value is 103 kCal/kWh which is 3% (approx) more than the design Heat Rate value arrived at by the Commission. It appears that guaranteed Heat Rate value specified by manufacturer, would have taken into consideration the effect of altitude, relative humidity etc. on the Heat Rate and some margin would have been provided in order to avoid any penalty in the performance guarantee test. In view of the above facts, there is reason for us to believe that the design value submitted by the petitioner to the Commission at the time of framing of regulations during 2002 for the first time for AGTPP was based on NCV of fuel and not on GCV of fuel. Accordingly, the Heat Rate based on NCV of fuel is converted to Heat Rate based on GCV of fuel, considering a minimum factor of 1.06. Thus, the guaranteed Heat Rate based on GCV of fuel works out to $(3337 \times 1.06) = 3537.22$ kCal/kWh. Taking into account the degradation factor of 4.47% over the manufacturer's guaranteed value (as considered by the Commission in its order dated 25.9.2002 in Petition No. 56/2002 for specification of norms for small GTs) the Station Heat Rate in respect of AGTPP works out to 3695.33 kCal/kWh (3537.22×1.0447) .

17. On scrutiny of the calculations of Gross Station Heat Rate for Baramura Gas Turbine plant (4x21 MW), in open cycle mode, including the results of the Performance Guarantee Test of



these machines, as submitted by the respondent, TSECL for the years 2009-10 and 2010-11, it is observed that the average actual Heat Rate of 3450 kCal/kWh achieved during 2009-10 is in respect of Unit No. IV which was commissioned during November, 2002 and average actual Heat Rate of 3470 kCal/kWh achieved during 2010-11 pertains to Units No. IV & Unit V, which were (commissioned during August,2010).These Heat Rates calculated by the respondent, TSECL by application of the same formula as adopted by the petitioner, are the Net Heat Rates and not the Gross Heat Rates. The Heat Rate based on NCV of fuel achieved by the generating station of respondent, TSECL is higher when compared to the Heat Rate based on NCV of fuel of AGTPP of the petitioner. Based on GCV of fuel, the actual Heat Rate of Gas Turbines of the generating station of respondent, TSECL would be in the range of 3700 kCal/kWh. Therefore, the submission of the respondent, TSECL that the Heat Rates of the machines in its generating station is better than the Heat Rate of the AGTPP of the petitioner is not correct.

18. The actual average Heat Rate based on GCV of fuel for the years 2009-10 and 2010-11 as submitted by the petitioner for AGTPP is 3757.42 kCal/kWh and 3761 kCal/kWh respectively. Based on the above discussions, and facts on record, we are of the view that the mistake in the data pertaining to Gross Station Heat Rate in respect of this generating station submitted by the petitioner during the finalization of operational norms for 2009-14 which had resulted in the notification of the 2009 Tariff Regulations, appears to be genuine for which necessary correction is required to be undertaken, in the interest of justice. Accordingly, in exercise of 'Power to relax' under Regulation 44 of the 209 Tariff Regulations, we relax the normative Gross Station Heat Rate in respect of AGTPP (open cycle mode) specified under Regulation 26(e)(ii) of the 2009 tariff Regulations. In terms of this, the normative Gross Heat Rate of 3500 kCal/kWh specified in respect of AGTPP (open cycle mode) under Regulation 26(e)(ii) of the 2009 Tariff Regulations, is revised to 3700 kCal/kWh.



Assam Gas Based Power Project (AGBPP)

19. As stated, the normative Heat Rate for AGBPP was specified by the Commission vide order its dated 25.9.2002 in Petition No. 56/2002 for the first time, based on the manufacturer's guaranteed design Heat Rate at site ambient conditions. The average guaranteed Heat Rate of the three modules is 2135 kCal/kWh. The normative Heat Rate was specified taking a degradation factor of 4.72% over the average design Heat Rate. Thus, the normative Heat Rate was specified as 2250 kCal/kWh. Before considering the submission of the petitioner that the actual Heat Rate submitted at the time of finalization of the 2009 Tariff Regulations for the period 2009-14., was based on the NCV of fuel, we consider it necessary to examine as to whether the Heat Rate specified by the Commission for the first time during the year 2002 for small GTs of the petitioner was based on the NCV of fuel and whether the Heat Rate norms specified in order dated 25.9.2002 had purportedly considered the guaranteed design Heat Rates on GCV of fuel. Accordingly, the petitioner was directed to furnish the relevant extracts of contractual agreement / bid specification documents etc. and the petitioner has submitted the same. It is observed from the said records that the design Heat Rate guaranteed by the manufacturers of GTs was based on the NCV of fuel (gas). Thus, it is evidently clear that the Heat Rate norms on GCV of fuel specified by the Commission in the 2004 Tariff Regulations for the period 2004-09 should have been 2385 kCal/kWh instead of 2250 kCal/kWh taking into account the conservative factor of 1.06 (instead of 1.103) for conversion of Heat Rate on NCV of fuel to GCV of fuel and hence the difference of about 135 to 140 kCal/kWh in the Heat Rate based on GCV of fuel. On analysis, it is noticed that the actual energy rate recovered during the period 2004-05 to 2007-08 was lower than the energy rate recoverable based on actual consumption of fuel and the actual price of fuel. Thus, it is evident that the petitioner had suffered due to higher actual Heat Rate in comparison to the Heat Rate norms specified under the 2004 Tariff Regulations, on account of mistake attributable to it. Based on the above discussions, and facts on record, we are of the view that the mistake in the data pertaining to Gross Station Heat Rate in respect of this generating station



submitted by the petitioner during the finalization of operational norms for 2009-14 which had resulted in the notification of the 2009 Tariff Regulations, appears to be genuine for which necessary correction is required to be undertaken, in the interest of justice. Accordingly, in exercise of 'Power to relax' under Regulation 44 of the 2009 Tariff Regulations, we relax the normative Gross Station Heat Rate in respect of AGBPP (combined cycle mode) specified under Regulation 26(e)(ii) of the 2009 tariff Regulations. The actual average Heat Rate on NCV of fuel for the period 2003-04 to 2007-08 for the generating station is 2369 kCal/kWh, based on which the normative Heat Rate of 2400 kCal/kWh has been specified under Regulation 26(e)(ii) of the 2009 Tariff Regulations. After conversion of the Heat Rate based on NCV of fuel to GCV of fuel, the said Heat Rate (combined cycle) for the generating station would be 2511 kCal/kWh (2369x1.06). It is noticed that the actual gross Heat Rate of GT machines of similar frame size, of Indraprastha Power Generation Company Limited (IPGCL), New Delhi is found to be in the range of 2504 kCal/kWh and 2557 kCal/kWh during 2007-08 to 2010-11. In terms of the above discussions, the normative Gross Heat Rate of 2400 kCal/kWh specified in respect of AGBPP (combined cycle mode) under Regulation 26(e)(ii) of the 2009 Tariff Regulations, is revised to 2500 kCal/kWh.

20. The petitioner has not submitted any details regarding the actual Heat Rate in respect of open cycle mode operation of AGBPP. In the absence of any details and a specific prayer in this regard for revision of norms, the GSHR in case of open cycle mode operation of AGBPP, as specified under Regulation 26(e)(ii) of the 2009 Tariff Regulations shall remain unchanged.

21. Based on the above decision, the prayer of the petitioner in paragraph 1(a) is disposed of by revision of Heat Rate norms for the generating stations as under:

	Combined Cycle (kCal/kWh)	Open Cycle (kCal/kWh)
Assam Gas Based Power Project (AGBPP)	2500	3440
Agartala Gas Turbine Power Project (AGTPP)	-	3700

22. The petitioner has also prayed for relaxation of Heat Rate norms with retrospective effect from 1.4.2009, and to allow the recovery of the landed cost of fuel from the beneficiaries from 1.4.2009. As stated, the mistake on the part of the petitioner in the submission of the data which has led to under recovery of landed cost of fuel from the beneficiaries has been brought to our notice only now for rectification and the Commission has allowed the revision of Heat Rate norms for the generating stations, as above, in the interest of justice, taking into consideration the facts on record and the genuine mistake on the part of the petitioner in submitting the data for Heat Rate to the Commission, during the finalization of the 2009 Tariff Regulations. However, the petitioner cannot be allowed to take advantage of its own mistake and recover the landed cost of fuel from the beneficiaries with retrospective effect from 1.4.2009. We are of the view that since the mistake on the part of the petitioner has been brought to the notice of the Commission through this petition, by the petitioner, for which the relief has been granted, it would only be prudent if the revision of Heat Rate norms, as above, is allowed prospectively from the date of filing of this petition, i.e 26.5.2011. We order accordingly. Consequent upon this, the petitioner is entitled to recover the landed cost of fuel from the beneficiaries based on the revised Heat Rate norms allowed as above, with effect from 26.5.2011. The prayers of the petitioner in paragraph 1(b) & (c) is disposed of in terms of the above.

23. Miscellaneous Petition No.133/2011 is disposed of accordingly.

Sd/-
[M. Deena Dayalan]
Member

Sd/-
[V.S. Verma]
Member

Sd/-
[S. Jayaraman]
Member

