

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 175/MP/2020

Coram:

**Shri Jishnu Barua, Chairperson
Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member**

Date of Order: 8th January, 2024

In the matter of

Petition for relaxation of the provisions of Regulation 42 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 dealing with the manner of computing the capacity charges effective 1.4.2020 insofar as the Gas Based Generating Stations of North Eastern Electric Power Corporation Limited.

And

In the matter of

North Eastern Electric Power Corporation Limited,
Brookland Compound, Lower New Colony,
Shillong -793003, Meghalaya.

...Petitioners

Vs

1. Assam Power Distribution Company Limited,
Bijulee Bhawan, Paltan Bazar,
Guwahati – 781001
2. Meghalaya Power Distribution Corporation Limited,
Short Round Road, Lumjingshai, Shillong – 793001
3. Tripura State Electricity Corporation Limited,
“Bidyut Bhawan”, Banamalipur, Agartala – 799001
4. Power & Electricity Department,
Govt. of Mizoram, Power House Complex,
Electric Veng, Aizawl – 796001.



5. Manipur Power Distribution Company Ltd.,
Government of Manipur
Electrical Complex, Khawai Bazar, Keishampat,
Imphal – 795001
6. Department of Power,
Government of Arunachal Pradesh,
Bidyut Bhawan, Itanagar – 791111.
7. Department of Power,
Government of Nagaland,
Kohima – 797001.
8. North Eastern Regional Power Committee,
NERPC Complex, Dong Parmaw,
Lapalang, Shillong – 793006.
9. North Eastern Regional Load Despatch Centre,
Dongtieh, Lower Nongrah, Lapalang,
Shillong – 793006.

...Respondents

Parties Present:

- Ms. Poorva Saigal, Advocate, NEEPCO
- Shri Shubham Arya, Advocate, NEEPCO
- Ms. Pallavi Saigal, Advocate, NEEPCO
- Shri Ravi Nair, Advocate, NEEPCO
- Ms. Shikha Sood, Advocate, NEEPCO
- Ms. Anumeha Smiti, Advocate, NEEPCO
- Ms. Elizabeth Pyrbot, NEEPCO
- Shri Ripunjay Bhuyan, NEEPCO

Order

The Assam Gas Based Power Plant of North Eastern Electric Power Corporation Ltd. is a Combined Cycle Gas Based Power plant having an installed capacity of 291 MW located at “Bokuloni Village in Dibrugarh District of the State of Assam”. The Power Plant uses Natural



Gas as its fuel. The Power Station consists of six Gas Turbines, each of 33.5 MW capacity and three Steam Turbines, each of 30 MW Capacity. The exhaust of each Gas Turbine is fed into a Waste Heat Recovery Boiler. The steam from two such boilers is used to run one Steam Turbine Generator set. Thus, there are three Combined Cycle Modules.

2. Agartala Gas Turbine based plant is a Combined Cycle Power Plant with an installed capacity of 135 MW comprises Four Gas Turbine (GT) units of 21 MW each and two Steam Turbine (ST) units of 25.5 MW. The beneficiaries of the North-Eastern States have been allocated a full capacity of 135 MW from the generating station.

3. Tripura Gas based Power Plant is a 101 MW (1x65.42 + 1x35.58) plant located at Monarchak, Sepahijala District, in the State of Tripura. The generating station comprises of one combined cycle module consisting of one Gas Turbine (GT) unit with a capacity of 65.42 MW and Steam Turbine (ST) unit with a capacity of 35.58 MW.

4. The Petitioner, NEEPCO, has filed the present petition seeking relaxation in the provisions of Peak/Off Peak Operation of Regulation 42 of the Tariff Regulations, 2019 in respect of Assam Gas Based Power Plant, Agartala Gas Turbine Combined Cycle Power Plant and Tripura Gas Based Combined Cycle Power Plant considering the peculiar circumstances for these plants. The Petitioner, NEEPCO, has filed the present Petition seeking the following reliefs:

(a) Relax the provisions of Peak/Off Peak Operation of Regulation 42 of the Tariff Regulations, 2019 in respect of Assam Gas Based Power Plant, the Agartala Gas Turbine Combined Cycle Power Plant and the Tripura Gas Based Combined Cycle Power Plant considering the peculiar circumstances mentioned hereinabove;

(b) Declare that the Petitioner shall be entitled to recover the full capacity charges for the three Generating Stations w.e.f. 1.4.2020 in the same manner as before and without the requirement to comply with the Regulation 42 of the Tariff Regulations, 2019; and

(c) Pass such further order or orders as this Commission may deem just and proper in the circumstances of the case.



Submission of the Petitioner

5. The Petitioner, in the present petition has mainly submitted as under:

- (i) All the Gas Based Power Plants of NEEPCO achieved commercial operation prior to the notification of the Tariff Regulations, 2019 and it had already entered into Fuel/Gas Supply Agreements with the respective suppliers.
- (ii) Pursuant to the notification of the Tariff Regulations, 2019, NEEPCO had approached the fuel suppliers for the arrangement to supply gas to NEEPCO, consistent with the changes brought about by the Tariff Regulations, 2019 of differential capacity charges based on peak/non-peak season or peak/non-peak time of the month at variable rates during the 24 hours. Similar Letters were written to ONGC and GAIL as well.
- (iii) In response to the request made by NEEPCO, the Fuel Suppliers have, however, expressed their inability to provide a variable flow rate of Gas supplied, as required under the Tariff Regulations, 2019.
- (iv) The primary reasons, as given by the Fuel Suppliers, for having no provision in the Gas Supply Agreement and/or the upstream contracts for varied supply of Gas are as under:
 - (a) The Gas supplies in Tripura are on a standalone basis from the gas fields in Tripura with no provision for import/export of Gas from outside the State. The location of the Gas Based Station in the North east does not enable the fuel supplier to make alternate arrangements for the supply of gas from other areas in the country;
 - (b) These gas supplies have been created on a 'Gas to Wire' concept, and there is no mechanism for Gas storage at the installations of the Fuel Supplier to supply gas at differential quantum during peak/non-peak seasons or hours. The Gas supply is on a consistent basis at all times; and
 - (c) That it would lead to adverse financial losses in terms of the sale of Gas for the Gas being flared and impairment loss for intermediate/frequent closure and opening of wells to control the quantum of supply, and these would damage the reservoir.
- (v) The issue was also raised before the North Eastern Regional Power Committee in the 160th Operation Co-ordination Committee held at Guwahati on 4th September 2019 by OTPC as well as NEEPCO. During the discussions, the OCC forum agreed on the request in-principle



and referred the matter to the next TCC/RPC meeting for deliberation.

- (vi) Gas Based Generating Stations are entirely dependent on fuel supply to ramp up/ramp down generation. The inability of the gas supplier to provide gas at variable flow rates will mean that the Gas Based Power Projects of NEEPCO will not be able to maintain the differential quantum of gas supply during peak/off-peak hours operation as per the Tariff Regulations, 2019.
- (vii) In addition to the above, the gas supply to the Gas Based Generating Stations of NEEPCO, in particular, the Assam Gas Based Generating Station, have been subjected to significant seasonal fluctuation in the supply of Gas due to the decision by the Central Government of providing priority to the Fertiliser Company, etc in the North East.
- (viii) It is not feasible at all, and it is not within the power or position of NEEPCO to control the flow of gas at differential quantum's from the gas suppliers at different periods, and NEEPCO cannot arrange the utilization of the Gas in a manner to have different generation during peak hours/season in comparison to non-peak hours/seasons. These are for reasons/factors not attributable to NEEPCO and beyond the control of NEEPCO. It is impossible for NEEPCO to act consistent with the provisions of the Regulation 42 of the Tariff Regulations, 2019.
- (ix) The facts and circumstances of the present case are a fit case for this Commission to exercise its powers to relax to exempt the three Gas Based Generating Stations of NEEPCO i.e. Assam Gas Based Power Plant, the Agartala Gas Turbine Combined Cycle Power Plant and the Tripura Gas Based Combined Cycle Power Plant from the application of Peak/Off Peak Operation provided under Regulation 42 of the Tariff Regulations, 2019.

Analysis and Decision

6. The Petitioner, NEEPCO, has filed the present petition seeking relaxation in the provisions of Peak/Off Peak Operation of Regulation 42 of the Tariff Regulations, 2019 in respect of all its gas based generating stations (i.e. Assam Gas Based Power Plant, the Agartala Gas Turbine Combined Cycle Power Plant and the Tripura Gas Based Combined Cycle Power Plant).



7. The Commission on 7.3.2019 notified the Central Electricity Regulatory Commission (Terms and conditions of Tariff) Regulations, 2019 applicable for the control period 1.4.2019 to 31.3.2024. In the said Regulations, the Commission, for the first time, had provided Capacity Charges to be payable differentially during peak season and non-peak season and, further, in each season, differentially during peak period and non-peak period of the month. The relevant extract of the regulation is provided as under:

“42. Computation and Payment of Capacity Charge for Thermal Generating Stations:

(1) The fixed cost of a thermal generating station shall be computed on annual basis based on the norms specified under these regulations and recovered on monthly basis under capacity charge. The total capacity charge payable for a generating station shall be shared by its beneficiaries as per their respective percentage share or allocation in the capacity of the generating station. The capacity charge shall be recovered under two segments of the year, i.e. High Demand Season (period of three months) and Low Demand Season (period of remaining nine months), and within each season in two parts viz., Capacity Charge for Peak Hours of the month and Capacity Charge for Off- Peak Hours of the month as follows:

Capacity Charge for the Year (CCy) = Sum of Capacity Charge for three months of High Demand Season + Sum of Capacity Charge for nine months of Low Demand Season

(2) The Capacity Charge payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae:

Capacity Charge for the Month (CCm) = Capacity Charge for Peak Hours of the Month (CCp) + Capacity Charge for Off-Peak Hours of the Month (CCop)

.....
(3) Normative Plant Availability Factor for “Peak” and “Off-Peak” Hours in a month shall be equivalent to the NAPAF specified in Clause (A) of Regulation 49 of these regulations. The number of hours of “Peak” and “Off-Peak” periods during a day shall be four and twenty respectively. The hours of Peak and Off-Peak periods during a day shall be declared by the concerned RLDC at least a week in advance. The High Demand Season (period of three months, consecutive or otherwise) and Low Demand Season (period of remaining nine months, consecutive or otherwise) in a region shall be declared by the concerned RLDC, at least six months in advance:

Provided that RLDC, after duly considering the comments of the concerned stakeholders, shall declare Peak Hours and High Demand Season in such a way as to coincide with the majority of the Peak Hours and High Demand Season of the region to the maximum extent possible:

Provided further that in respect of a generating station having beneficiaries across different regions, the High Demand Season and the Peak Hours shall correspond to the High Demand Season and Peak Hours of the region in which majority of its beneficiaries, in terms of percentage of allocation of share, are located.

(4) Any under-recovery or over-recovery of Capacity Charge as a result of underachievement or over-achievement, vis-à-vis the NAPAF in Peak and Off-Peak Hours of a Season (High Demand Season or Low Demand Season, as the case may be)



shall not be adjusted with under-achievement or over-achievement, vis-à-vis the NAPAF in Peak and Off-Peak Hours of the other Season:

Provided that within a Season, the shortfall in recovery of Capacity Charge for cumulative Off-Peak Hours derived based on NAPAF, shall be allowed to be off-set by over-achievement of PAF, if any, and consequent notional over-recovery of Capacity Charge for cumulative Peak Hours in that Season:

Provided further that within a Season, the shortfall in recovery of Capacity Charge for cumulative Peak Hours derived based on NAPAF, shall not be allowed to be off-set by over-achievement of PAF, if any, and consequent notional over-recovery of Capacity Charge for cumulative Off-Peak Hours in that Season.

(5) The Plant Availability Factor achieved for a Month (PAFM) shall be computed in accordance with the following formula:

.....

Note: DCi and IC shall exclude the capacity of generating units not declared under commercial operation. In case of a change in IC during the concerned period, its average value shall be taken.

(6) In addition to the capacity charge, an incentive shall be payable to a generating station or unit thereof @ 65 paise/ kWh for ex-bus scheduled energy during Peak Hours and @ 50 paise/ kWh for ex-bus scheduled energy during Off-Peak Hours corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) achieved on a cumulative basis within each Season (High Demand Season or Low Demand Season, as the case may be), as specified in Clause (B) of Regulation 49 of these regulations.

(7) The provisions under Clauses (1) to (6) of this Regulation shall come into force with effect from 1.4.2020. Till that date, the capacity charge for a thermal generating station determined under these regulations shall be recovered in accordance with the provisions contained in Clauses (1) to (4) of Regulation 30 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, subject to the condition that the NAPAF and NAPLF shall be taken as specified under these regulations.”

8. The Peak/Off Peak Operation provided under Regulation 42 of the Tariff Regulations, 2019 has been made effective from 03.02.2021. The Petitioner has submitted that it is impossible for them to act consistent with the provisions of Regulation 42 of the Tariff Regulations, 2019. Accordingly, it is not feasible to control the flow of gas at differential quantum from the gas suppliers at different periods and NEEPCO cannot arrange the utilization of the gas in a manner to have different generation during peak hours/season in comparison to non-peak hours/seasons.

9. The matter was taken up for hearing by the Commission on 14.7.2020, 9.2.2023, 21.3.2023 and 29.5.2023. The matter was heard on ‘admission’ via video conferencing, on 14.7.2020. The Commission admitted the petition and directed to issue notice to the



Respondents. During the hearing, the Commission asked the Petitioner for the details of steps taken for the arrangement of fuel on a variable basis. The learned counsel for the Petitioner referred to the letters addressed by it to the Fuel Suppliers and the response letters received from the fuel suppliers, expressing their inability to provide a variable flow rate of gas supplied.

10. The matter was last heard on 29.5.2023. None appeared on behalf of the Respondents. The learned counsel for the Petitioner made a detailed oral submission and prayed that the relaxation sought for computing the capacity charges (from 1.4.2020) in terms of Regulation 42 of the 2019 Tariff Regulations for the gas based generating stations of the Petitioner might be relaxed. The Commission directed the Petitioner to file details of PLF achieved during the last 4 years during peak and off-peak hours. Subject to the above, the order in the petition was reserved.

11. The Petitioner, in compliance, has submitted the details. The additional information/clarification plant-wise as submitted by the Petitioner are as under:

Assam Gas based Power Station (AGBPS):

12. The Petitioner, with respect to the PAF of the Assam gas-based Power station has mainly submitted that it experiences variations in gas supply throughout the year. Though the contracted quantity is 1.4 MMSCUM per day, M/s OIL (supplier) could not supply the contracted quantum regularly. The actual PAF Of the Assam Gas based Power plant in peak and off-peak hours for the period 2020-21 and 2021-22 are as under:

CUMMULATIVE PAFM (in %)	AGBPP			
	2020-21		2021-22	
	CC Peak	CC Off Peak	CC Peak	CC Off Peak
ACTUAL PAF	69.34	69.84	71.12	71.59
NORMATIVE	72.00	72.00	72.00	72.00

13. It could be seen from the above details that the Petitioner during 2020-21 and 2021-22 could neither achieve the Normative PAF during peak hours nor during off-peak hours.



However, the reason for less PAF is mainly due to the less gas supply from the supplier Oil India Limited. Even during 2004-05 to 2007-08, the Target Availability of 80% could not be achieved by the Assam GPS. However, the average availability of the station for the years 2004-05 to 2007-08 was about 73% despite the availability of 70% (Actual PLF) in the year 2007-08. Accordingly, a target availability norm of 72% was allowed for the tariff period 2009-14. The Commission continued the same availability norm, i.e. 72% during the tariff period 2014-19 also as the gas supply condition in the station had not improved. Accordingly, the Commission has already specified relaxed norms of 72% in the 2014 Tariff Regulations duly keeping in view the gas supply condition to the station to the tune of only 1.4 MCMD. The Petitioner, during the period from July 2016 to March 2017 also could not achieve the Normative Target Availability of the station of 72% due to inadequate gas supply by Oil India Limited (OIL). Accordingly, Petition No. 225/MP/2017 was filed by the Petitioner, seeking compensation for loss of Capacity Charge on account of inadequate availability of fuel gas. The Commission, vide its order dated 5.11.2018 disposed of the petition, rejecting the claim of the Petitioner and did not relax the Target Availability under provisions of Regulation 54 (Power to Relax) of the 2014 Tariff Regulations. Aggrieved by the decision of the Commission, the said order dated 5.11.2018 was challenged before the Appellate Tribunal for Electricity by the Petitioner. Appellate Tribunal of Electricity vide order dated 4.8.2022, had remanded the matter back to the Commission. Consequent upon the remanded order, the Commission vide order dated 29.4.2023, had allowed the loss of PAF as deemed availability during the period 1.7.2016 to 31.3.2017 exercising its power under Regulation 54 of 2014, Tariff Regulations.

Agartala Gas based Power Station:

14. The Petitioner, with respect to the Agartala gas-based Power station, has submitted that the NPAF of the generating station is 85%. The actual PAF of the Agartala combined cycle Power plant in peak and off-peak hours for the period 2020-21 and 2021-22 are as under:



CUMMULATIVE PAFM (in %)	AGTCCP			
	2020-21		2021-22	
	CC Peak	CC Off Peak	CC Peak	CC Off Peak
ACTUAL PAF	89.48	90.51	81.54	82.78
NORMATIVE	85.00	85.00	85.00	85.00

15. It could be seen from above that Agartala combined cycle Power plant has achieved more than the normative PAF during 2020-21 and it could not achieve the normative PAF during 2021-22. The PAF is below NPAF during 2021-22 due to low gas pressure and less availability of gas. The Petitioner has further submitted that the gas supplier GAIL is not supporting the variable gas demand due to a change in schedule for RRAS and beneficiary requirements. Consequently, declared capacity during the period was revised as per gas availability on real time basis.

Tripura Gas based Power Station:

16. The Petitioner, with respect to the Tripura gas-based Power station, has submitted that the NPAF of the generating station is 85%. The actual PAF of the Tripura Gas based Power plant in peak and off-peak hours for the period 2020-21 and 2021-22 are as under:

CUMMULATIVE PAFM (in %)	TGBPP			
	2020-21		2021-22	
	CC Peak	CC Off Peak	CC Peak	CC Off Peak
ACTUAL PAF	62.03	62.24	82.52	83.00
NORMATIVE	85.00	85.00	85.00	85.00

17. It is observed from the above that the actual PAF of TGBP is less than the normative PAF during 2020-21 and 2021-22. We further find that the same is below NPAF, it is stated that it is due to less availability of gas.

18. Regulation 42 of 2019, Tariff Regulations provides for computation and payment of capacity charge for thermal generating stations, which shall be recovered under two segments,



i.e. High Demand Season and Low Demand Season of the year, and within each season in two parts viz., Capacity Charge for Peak Hours of the month and Capacity Charge for Off-Peak Hours of the month. For the recovery of capacity charge, the generating station shall achieve the NPAF.

19. Regulation 1(3) (47) of the 2019 Tariff Regulations provides the definition of plant Availability factor as under:

'Plant Availability Factor' or '(PAF)' in relation to a generating station for any period means the average of the daily declared capacities (DCs) for all the days during the period expressed as a percentage of the installed capacity in MW less the normative auxiliary energy consumption;

20. Also, as per the definition under Regulation 1(3) (16) of the 2019, Tariff Regulations, the declared capacity means:

'Declared Capacity' or 'DC' in relation to a generating station means, the capability to deliver ex-bus electricity in MW declared by such generating station in relation to any time-block of the day as defined in the Grid Code or whole of the day, duly taking into account the availability of fuel or water, and subject to further qualification in these regulations;

21. The availability of the generating station mainly depends upon the fuel availability as well as the technical availability of the machine/generating station. From the details furnished by the Petitioner and from the tables above, it is clear that considering the average peak and off-peak hours of the year, the Petitioner is unable to achieve the normative PAF allowed to the generating stations. The PAF achieved during peak and off-peak hours is more or less the same. This is mainly due to the fact that Petitioner does not have a storage facility and also does not have any alternate arrangement of fuel to declare additional availability over and above the availability corresponding to the gas supply available from Oil India. The Petitioner has submitted that the reason for the low PAF in all the generating stations of the Petitioner is mainly due to less supply of gas from the oil supplier. The inadequate supply of gas will have an impact on the availability of the generating station. Therefore, even relaxation in the provisions of Peak/Off Peak Operation of Regulation 42 of the Tariff Regulations, 2019, in



respect of all its gas based generating stations would not enable the petitioner to recover its full capacity charges.

22. Further, Regulation 76 of the 2019 Tariff Regulations provides as under: -

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

23. The Power to Relax under the 2019 Tariff Regulations is in general terms, and its exercise is discretionary. As regards the exercise of power to relax, the APTEL vide its judgment dated 25.3.2011 in appeal No. 130/2009 (RGPPL v. CERC & anr.) has observed the following: -

“18.1 The Regulations of the Central Commission and the decision of the Tribunal and the Supreme Court confer the judicial discretion to the Central Commission to exercise power to relax in exceptional case. However, while exercising the power to relax there should be sufficient reason to justify the relaxation and non-exercise of discretion would cause hardship and injustice to a party or lead to unjust result. It has also to be established by the party that the circumstances are not created due to act of omission or commission attributable to the party claiming relaxation. Further, the reasons justifying relaxation have to be recorded in writing.”

24. It is clear from the above observation of the APTEL that the Central Commission has discretionary power to relax norms based on the facts and circumstances. However, there has to be a sufficient and reasonable justification, and such a case has to be one of those exceptions to the general rule. There must be sufficient reason to justify the Power to relax. Also, the relaxation should result in mitigating the hardship and injustice to the party. In the instant case, the relaxation in the provisions of Peak/Off Peak Operation of Regulation 42 of the Tariff Regulations, 2019 would not enable the petitioner to achieve the normative PAF and recover its full capacity charges. In view of the discussions, we are not inclined to invoke our jurisdiction under Regulation 76 of the 2019 Tariff Regulation for power to relax.



25. We have also examined the alternate option for power to remove difficulties under, Regulation, 77 of the 2019 Tariff Regulations, which provides as under: -

***“77. Power to Remove Difficulty: If any difficulty arises in giving effect to the provisions of these regulations, the Commission may, by order, make such provision not inconsistent with the provisions of the Act or provisions of other regulations specified by the Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these regulations.*”**

26. In our considered view, the regulation of power to remove difficulty is to be exercised only when there is difficulty in effecting the Regulations and not when difficulty is caused by the application of the Regulations. As already noted in para 24, invoking Regulation 76 of the 2019 Tariff Regulation relating to power to relax would not enable the petitioner to accrue any benefit, thus exercising of power to remove difficulties does not arise in the present case.

27. In the light of the above deliberations and discussions, balancing the interests of the generator and the beneficiaries, the Commission is of the considered view that it is not a fit case for the Commission to invoke Regulation 76 and Regulation 77 of the 2019 Tariff Regulations. Accordingly, we are not inclined to allow the claim of the Petitioner for relaxation in the provisions of Peak/Off Peak Operation of Regulation 42 of the Tariff Regulations, 2019 in respect of all its gas based generating stations (i.e. Assam Gas Based Power Plant, Agartala Gas Turbine Combined Cycle Power Plant and Tripura Gas Based Combined Cycle Power Plant).

28. Petition No. 175/MP/2020 is disposed of in terms of the above discussions and findings.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I. S. Jha)
Member

Sd/-
(Jishnu Barua)
Chairperson

