

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition Nos. 220/MP/2021**

**Coram:**

**Shri Jishnu Barua, Chairperson**

**Shri I. S. Jha, Member**

**Shri A. K. Goyal, Member**

**Shri P.K. Singh, Member**

**Date of Order : 3rd January, 2024**

**In the matter of**

Petition under Section 79(1)(a) of the Electricity Act, 2003 read with Regulation 3 (25), 76 and 77 of the CERC (Terms and Conditions of Tariff) Regulations, 2019 praying for declaration of Deemed Availability for the period from 24.07.2020 to 02.10.2020 in respect of MTPS Stage-II (2X195 MW).

**And in the matter of:**

Kanti Bijlee Utpadan Nigam Ltd.,  
NTPC Bhawan, Core-7, Scope Complex 7,  
Institutional Area, Lodhi Road, New Delhi – 110003

**.... Petitioner**

**Vs**

1. Bihar State Power Holding Company Ltd. (BSPHCL),  
Vidyut Bhawan, Bailey Road, Patna - 800021.
2. North Bihar Power Distribution Company Ltd. (NBPDC),  
Vidyut Bhawan, Bailey Road, Patna- 800021.
3. South Bihar Power Distribution Company Ltd. (SBPDCL),  
Vidyut Bhawan, Bailey Road, Patna- 800021.
4. Jharkhand Bijlee Vitaran Nigam Ltd.,  
Engineering Building, HEC Township, Dhurwa, Ranchi – 834 004
5. GRIDCO Ltd.,  
Janpath, Bhubaneshwar – 751 022
6. West Bengal State Electricity Distribution Company Ltd.,  
Vidyut Bhawan, Bidhannagar, Block DJ, Sector-II,  
Salt Lake City, Kolkata – 700 091
7. Power Department,  
Govt. of Sikkim, Kazi Road, Gangtok, Sikkim – 737 101



8. Damodar Valley Corporation (DVC),  
DVC Towers, VIP Road, Kolkata, West Bengal – 700054 .....**Respondents**

### **ORDER**

The Petitioner, Kanti Bijlee Utpadan Nigam Limited (hereinafter to be referred as “the Petitioner”), has filed the instant petition under Section 79 (1)(a) of the Electricity Act, 2003 (in short ‘the Act’) read with Regulations 3 (25), 76 & 77 of the CERC (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred as 2019, Tariff Regulations) praying for declaration of Deemed Availability for the period from 24.07.2020 to 02.10.2020 in respect of Muzaffarpur Thermal Power Station (MTPS) Stage-II (2X195 MW).

2. The Petitioner has made the following prayers in the instant petition:
- a. Grant deemed availability for a period of 33 days during the unit outage period.
  - b. Pass such orders as deemed fit and necessary in the facts and circumstances of the present case.

#### **Background:**

3. The Petitioner, Kanti Bijlee Utpadan Nigam Limited (KBUNL), is a company established under the provisions of the Companies Act, 1956 and had its registered office at NTPC Bhawan, Core – 7, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi – 100003. The Petitioner has set up Muzaffarpur Thermal Power Station (MTPS) at Kanti block, Muzaffarpur district, Bihar and owns and operates the same. Initially, Kanti Bijlee Utpadan Nigam Limited (KBUNL) was established as a Joint Venture (JV) between NTPC Ltd. (65 % stake) and Bihar State Power Generating Company Limited (BSPGCL) (35 % stake). Subsequently, Govt. of Bihar, vide notification dated 27.06.2018, transferred the equity share of BSPGCL to NTPC Ltd., and KBUNL has become a wholly owned subsidiary company of NTPC Ltd.

4. Muzaffarpur Thermal Power Station (MTPS) has two stages i.e. Stage – I and II. Stage – I is 220 MW (2 X 110 MW) and supplying 100 % power to DISCOMs of Bihar (North Bihar Power Distribution Company Ltd. – NBPDC and South Bihar Power Distribution Company Ltd. – SBPDCL). Stage II is 390 MW (2 x 195 MW), and



the Ministry of Power, Government of India, vide its letter dated 10.12.2010, allocated the capacity of MTPS Stage – II amongst the beneficiaries of the Eastern Region, i.e. Bihar, Jharkhand, West Bengal, Odisha, Sikkim and DVC. The Commercial Operation Dates (COD) of units 1 and 2 of stage II, MTPS are 18.03.2017 and 01.07.2017, respectively.

### **Submissions of the Petitioner**

5. The Petitioner, in the instant petition, has prayed for the deemed availability of unit 4 of MTPS stage II during the period from 24.07.2020 to 02.10.2020 and made the following submissions:

- (a) The NAPAF of 85 % provided in the 2014 Tariff Regulations for the thermal power stations is to provide operation flexibility and to mitigate any risk arising out of fuel and operational contingencies involved, as these units consist of high-speed rotating equipment and operate at high temperatures and pressure.
- (b) The overhauling period for a single unit is in the range of 18 – 45 days i.e. 5 – 12 % in loss of availability. Thus, the balance margin of availability accommodates loss of availability arising out of fuel or forced outage due to equipment problems. In the case of multiple units, by taking planned shutdown of one after another, the operational flexibility is maintained. and NAPAF is achieved. However, in case of a lower no. of units, i.e. 2, the operation flexibility will be low in achieving the target availability.
- (c) The 2019 Tariff Regulations were notified on 07.03.2019 and are in force from 01.04.2019 to 31.03.2024. Regulation 42 of the 2019 Tariff Regulations has introduced a new mechanism to determine the availability for recovery of Annual Fixed Charges (AFC), and the same came into effect on 01.04.2020.
  - i. In terms of above Regulation 42, the financial year has been divided into two segments i.e. high demand season (3 months) and low demand season (remaining 9 months).
  - ii. Each day of the season, has been bifurcated into two parts, i.e. peak period (4 hours) and off-peak (20 hours).
  - iii. The Concerned RLDC is responsible for specifying high-demand and low-demand seasons, at least 6 months in advance and peak / off-peak at least one week in advance for respective regions.



- iv. Accordingly, the Eastern Regional Load Dispatch Centre (ERLDC) has declared the high demand season for 2020 – 21 as July 2020, August 2020 and September 2020 and the remaining 9 months as low demand season for eastern region stakeholders.
- (d) In terms of the above Regulation, as the NAPAF has to be maintained on a seasonal basis, the operation flexibility in achieving seasonal NAPAF was further affected, particularly for stations with two units in high-demand season. Thus, the under-recovery or over-recovery of one season cannot be adjusted with another season.
- (e) Accordingly, to achieve seasonal NAPAF and provide maximum energy availability during high demand season, i.e. July – September 2020, the annual overhauling of unit 4 was planned in October 2020.
- (f) On 24.07.2020, the unit 4 was tripped on 'Gen. Shaft Vibration Very High' and while restoring the machine, during the build-up of generator voltage, the machine again tripped on 'Gen. Shaft Vibration Very High'. On primary inspection and analysis of data, testing of the generator was recommended. Thus, the unit was taken under shutdown for inspection and testing of the generator rotor. This inspection and testing involve specific testing kits/equipment and specialized experts.
- (g) On 25.07.2020, M/s Power Test Asia was requested to carry out testing of the generator rotor immediately, but its engineer reported at the site on 30.07.2020 due to movement constraints on account of COVID-19. Further, due to restrictions in the movement of manpower and material, the test was conducted on 05.08.2020. Thus, there was a delay of 10 days to establish the exact reasons for the rotor fault.
- (h) Considering the test results of the investigation/inspection carried out, it was established that field winding was open and one pole was grounded. However, as the stator design is being Turbo Vacuum Pressure Impregnated (TVPI), the rotor was unique and its repair can be done at OEM works (BHEL, Haridwar) only but not at the site. Accordingly, to revive unit – 4, the purchase requisition and NIT for the generator rotor were done on 06.08.2020.



- (i) The overhauling of Unit 4 was originally planned in October 2020 i.e. low demand period, but due to the tripping of the unit on 24.07.2020 and the non-availability of the rotor on an immediate basis, it was decided to utilize the available time for overhauling activities.
- (j) BHEL vide email dated 07.08.2020 submitted mobilization plan and raised the issue of unavailability of accommodation for balance mobilization, including sub-vendor and requested petitioner to arrange for the same. However, the accommodation couldn't be confirmed due to 7 days of quarantine of COVID-19 cases of employees and their associates. Thus, there was a delay of 4 days to mobilize manpower.
- (k) Vide letter dated 11.08.2020 intimated to ERPC that to utilize the time available for repair of the faulty rotor, the unit is taken for overhauling.
- (l) Due to COVID-19 and consequent lockdown, the planned overhaul got extended by 23 days, beyond the stipulated period of 35 days. The details in brief are as follows:
- i. Inspection of the new rotor at OEM was witnessed by NTPC and Inspection Report, and MDCC issued on 29.08.2020. These witnessing tests under COVID-19 led to a delay of 3 days.
  - ii. A new rotor was dispatched from Haridwar on 31.08.2020 and reached the site on 05.09.2020 by road. The same affected by two days on account of COVID-19.
  - iii. Teething problems during assembly of new Generator rotor, necessitated to take up issue with OEM and physical movement of external agency.
  - iv. As no local vendor was available due COVID - 19 pandemic, 14 no. of LP-Gen coupling bolts were machined at CIPET Hajipur.
- (m) In order to achieve the target Availability in High Demand Season, i.e. July 2020 – September 2020, the total outage of the instant generating unit was 70 days (including 35 days of overhauling period) out of 92 days. In case, there would have been no COVID-19 and restrictions thereof, the unit could have been revived within the stipulated time of overhauling i.e.35 days.
- (n) In spite of taking necessary steps for COVID-19 and the electricity was declared as an essential commodity and exempted from lockdown, the



workforce of contractors did not turn out full in number due to fear and restrictions imposed by central and state governments. Thus, the restoration work was slow in progress; even though the unit was tripped on 24.07.2020, it was restored on 02.10.2020. Hence, the target availability could not be achieved.

- (o) In view of the above, the delay caused in carrying out testing and overhauling was beyond the reasonable control of the petitioner, and the same is akin to Force Majeure as per Regulation 3(25) of 2019, Tariff Regulations and the case is fit for exercising Power to Relax / Power to Remove difficulties by Commission.
- (p) Therefore, the provision of achieving the season-wise Target Availability separately in 2020 – 21 for MTPS stage II, may be relaxed. Otherwise, it is deemed availability for a delayed period of 33 days. i.e. 26.07.2020 to 05.08.2020 (10 days) and 09.09.2020 to 02.10.2020 (23 days) may be allowed under Regulation 3 (25) read with Regulation 76 and 77 of the Tariff Regulations, 2019.

### **Replies and Rejoinders**

6. The Respondent, WBSEDCL, vide affidavit dated 16.12.2021, has submitted its reply. The brief of submissions made by Respondent, WBSEDCL, are as under:
- a. The 2019 Regulations provide deemed availability only for transmission elements under outage, but not for generating stations. Thus, the petition is not maintainable.
  - b. Regulation 3(25) of the 2019 Tariff Regulations provides relief under force majeure for under-construction projects. However, in the instant case, availability could not be declared due to mechanical failure, shutdown for inspection & testing, COVID-19 restrictions, problems with OEM, etc, and these do not disguise 'Force Majeure'. Thus, the claim for relief in terms of Regulation 3(25), read with Regulation 76 and Regulation 77 of CERC Tariff Regulations 2019, is untenable.
  - c. In terms of the 2019 Tariff Regulations, the 'Declared Capacity' is the capability to deliver ex-bus electricity, i.e. physical and legal capability.



- d. Article 8.0 of the PPA dated 30.12.2010, signed with the petitioner, provides the Force majeure as 'war, rebellion, mutiny, civil commotion, riot, strike, lockout, forces of nature, accident, an act of God, or any other such reason beyond the control of concerned party'. Further,
- The article provides that 'neither party shall be liable for any claim for any loss or damage whatsoever arising out of failure to carry out the terms of the agreement to the extent that such a failure is due to Force Majeure events.
  - The article does not provide any financial claim.
  - Any other claim under this article, is subjected to issuance of written notice to other party regarding the existence of 'Force Majeure'.
- e. Considering the above, since there is no claim against the petitioner, article 8.0 of PPA is not applicable. Further, as the petitioner has not given any notice regarding the same, the claim of Force Majeure under Article 8.0 of PPA is misconceived.
- f. Article 4.2 of PPA provides that the project would be deemed to be available for Declared Capacity for any reasons not attributable to the petitioner, which restricts scheduling and dispatch of electricity. However, the present case is on account of mechanical failure.
- g. The subject shutdown, led to the loss of power supply and necessitated beneficiaries to either resort to load shutdown or arrange power from alternative sources, i.e. borne opportunity cost.
- h. The deemed availability would be outside the scope of PPA and cannot be considered, as the same amounts to the recovery of annual fixed charges, in spite of beneficiaries not receiving any power but incurring additional expenses.
- i. The 'Power to Relax' is provided only for the limited purpose of removing inconsistencies that may arise while giving effect to any law, and such provisions cannot be invoked to address the alleged difficulty of any person or parties.
- j. The notifications of Govt. of India / Bihar on COVID-19 measures, have not prohibited the running/operation of the plant.
- k. The delay claimed on account of COVID-19 restrictions cannot be tenable as generation, transmission and distribution of power were considered essential services and exempted from lockdown.



- l. Regulation 77 provides power to remove difficulties in giving effect to the regulations but not a difficulty faced by the Petitioner, and the same would be contrary to the law settled by the Hon'ble Supreme Court on power to remove difficulty.
- m. The Power to remove difficulty is a statutory power but not a legislative power. Thus, provisions of 2019, Tariff Regulations cannot be altered.
- n. The Regulation 42 of the 2019 Tariff Regulations provides for recovery of O&M expenses and interest on loans for plants under shutdown on account of renovation and modernization. However, in the instant case, the plant was shut down not on account of "renovation and modernization".
- o. The letter dated 11.8.2020 to the Eastern Regional Power Committee (ERPC) indicates that the overhauling works were scheduled in March 2020 but could not be carried out. As per the above letter, it appears that the delay is on account of Combustion Modification works to be carried out in November / December 2021. Further, as per the above letter, the scheduled maintenance was from 09.03.2020, but in the petition, the scheduled maintenance was mentioned as October 2020. The same is contradictory.
- p. In the instant case, after tripping and foreseen unavailability, the Petitioner has not informed the RLDC about the station's availability and revision of the schedule thereof.

### **Hearing dated 21.03.2022**

7. The Petition was heard on 21.03.2022, and the Commission vide RoP in hearing dated 21.03.2022 'admitted' the petition and directed the Petitioner to submit information regarding the inconsistency in the number of days claimed for deemed availability and the Force Majeure provision, under which deemed availability was claimed.

8. In response, the Petitioner vide affidavit dated 08.04.2022 has submitted certain information, and the brief of the same is as follows:

- a. The total outage period of the Unit was 70 days (24.07.2020 to 02.10.2020), and the overhauling period was 35 days, and the same was not claimed for





deemed availability. Out of the remaining 35 days, the deemed availability of the Unit sought for 33 days on account of various reasons (10 days i.e. 26.07.2020 to 05.08.2020 – delay in establishing the exact reason for generator fault and 23 days i.e. 09.09.2020 to 02.10.2020 – delay in the mobilization of manpower by BHEL, delay in witnessing rotor test at BHEL, Haridwar and delay in transportation of new rotor from OEM to site, delay in machining of LP gen coupling bolts).

- b. With regard to the 'force majeure' provision, it was submitted that the claim is in terms of Regulation 3(25) of the 2019 Tariff Regulations but is not any contractual relief by invoking 'force majeure' against the respondents. Further, Hon'ble Commission has the judicial discretion under Regulations 76 and 77 of the 2019 Tariff Regulations to relax the provision of achieving target availability in respect of the generating station for above 33 days. Further, the petitioner has reiterated submissions made in the original petition.

9. The Respondent, BSPHCL, vide affidavit dated 21.04.2022, submitted its reply. In this regard, it is noticed that the many submissions of BSPHCL are similar to those of WBSEDCL. The additional submissions made by BSPHCL in brief are as follows:

- a. As the 2019 Tariff Regulations, do not provide any deemed availability for generating stations, Regulation 76, i.e. Power to Relax, cannot be invoked to create a provision where none exists. Similarly, Regulation 77, i.e. Power to Remove Difficulty, cannot be invoked other than removing difficulty in giving effect to the objectives of these Regulations. The Petitioner has failed to make out any such exceptional case in the instant petition to exercise the discretion.
- b. As Section 10 of the Electricity Act, 2003, mandates the generating company to maintain the generating stations, the Petitioner cannot invoke Regulations 76 and 77 to escape its own shortcomings.
- c. Regulation 3 (25) of the 2019 Tariff Regulations refers to circumstances that partly or fully prevent the generating company from completing the project within the time specified in the Investment Approval. Further, these circumstances or events were not within the control and could not have been



avoided had the generating company taken reasonable care or complied with prudent utility practices. Thus, Regulation 3 (25) cannot be invoked.

- d. In terms of article 8 of the PPA dated 22.01.2010, any party claiming the benefit of the force majeure clause, is required to reasonably satisfy the other party of the existence of such event and give written notice within a reasonable time. However, as the Petitioner has failed to issue any such notice, the present petition is an afterthought and cannot be used as a tool to defeat its failure to carry out its obligations and responsibilities.
- e. The associated difficulties in the operation of the generator rotor cannot be considered as unforeseen. Further, the uniqueness of the rotor is known; the petitioner could have had some arrangements available to handle the situation. However, no information was provided regarding how the subject fault was unanticipated.
- f. Though the petitioner has claimed the uniqueness of the generator rotor but has not provided any details of the operational flexibility of such rotor. Further, the petitioner has claimed that the purchase order was placed after the subject fault, but has not provided any documents to establish purchase requisition and NIT for the generator rotor.
- g. Power generation is mentioned as an 'essential service' and considered an 'exception' in COVID-19-related circulars issued by Govt. of India / Bihar, and also the support was extended in terms of necessary permissions, passes, etc, for smooth operation and maintenance of power generation.
- h. As per the information submitted by the petitioner, the lapses and shortcomings are on the part of the Petitioner. Some of such facts are as follows:
  - The COD of the unit was 01.07.2017 and break down happened on 24.07.2020, i.e. it served only a short span of 3 years, which indicates the failure of the petitioner in commissioning and operation, and end consumers cannot be burdened for such failure.
  - An email dated 29.07.2020 reveals that Powertest Asia Pvt. Ltd. was waiting for a formal PO, and on the same day, the engineer was deployed. Further, as per an email dated 04.08.2020, the scope of works was yet to be provided and as per another email dated 05.08.2020, the work was of a 'one day job',



- and the engineer of Powertest Asia Pvt. Ltd. has been waiting since 30.07.2020 and requested to expedite testing. Thus, the delay of 10 days in establishing the exact reasons for the root cause/failure cannot be claimed.
- As per the letter dated 11.08.2020, the scheduled annual maintenance approved in LGBR was March 2020, but the same was delayed.
  - The purchase order dated 28.09.2020 for LP gen coupling was almost a month after MDCC dated 29.08.2020.
- i. The petitioner being aware of required manpower, equipment, material, time etc, and also aware of COVID–19, could have planned appropriately, and made necessary arrangements, including pursuance with contractors, issuance of passes, permissions etc, to handle the situation expeditiously and fully prepared for overhauling, witnessing rotor testing, rotor transportation etc, avoided these lapses and cannot take shelter of lockdown on account of COVID – 19.
  - j. The Tariff Regulations are being issued after consultation with stakeholders, and in terms of Regulation 42, ERLDC has declared high demand season well in time, and the petitioner had sufficient notice and opportunity for maintenance measures, mitigative measures etc and to ensure the concerned unit working in proper condition and ready for high demand season. Thus, difficulties arising out of Regulation 42 and hardship to the petitioner are unfounded and unsubstantiated. Therefore, any claim for a reduction in operational flexibility is unsustainable.
  - k. Thus, none of the reasons for the delay mentioned were beyond the control of the Petitioner or akin to force majeure or due to constraints of the pandemic situation but are attributable to shortcomings or failures to make necessary arrangements in time for manpower and material. Any financial burden arising out of inefficiency/mismanagement/failure on the part of the petitioner cannot be imposed on beneficiaries. Thus, these cannot be considerable for deemed availability, and the petition is not maintainable.
  - l. Hon'ble APTEL and this Commission, in various orders, have taken a view that the Power to Relax has to be exercised only in exceptional cases, and it has to



be established by the party that the circumstances are not created due to an act of omission or commission attributable to the party claiming the relaxation.

10. Subsequently, the Petitioner, vide its affidavit dated 27.04.2022, filed its rejoinder to the reply of Respondent No.1, BSPHCL, and reiterated certain submissions made in the original petition. A brief of additional submissions made by the petitioner in rejoinder to the reply of BSPHCL is as follows:

- a. The 'Power of Relaxation' under Regulations 76 and 77 of the Tariff Regulations 2019 are not circumscribed by contractual provisions such as Article 8 of the PPA. Further, the situation faced by Petitioner was similar to 'Force Majeure' but has not claimed relief under Article 8 of the PPA. Thus, no notice is required.
- b. It is not claiming any losses or damages as a compensation or contractual remedy but seeking a regulatory relief i. e., relaxation in NAPAF specified in Regulation 49, since it was unable to achieve the same for reasons beyond its control.
- c. The email of 25.07.2020 of KBUNL is a request to submit an offer for deployment of the engineer for testing by 29.07.2020, and the email of Powertest Asia dated 29.07.2020 only states that it was waiting for a formal PO. The PO was released in a quick time, after following relevant standards, and the engineer was not waiting at the site from 30.07.2020.
- d. As the testing is to be conducted in situ after following COVID protocols, including a limited number of people permitted to the premises, the site could be made available to the engineer only on 05.08.2020, and the test conducted on the same day.
- e. Though power generation was exempted from COVID – 19 restrictions, the restrictions on the movement of persons and materials led to delays in finding out the fault, reasons and rectification thereof. Further, even though restrictions on transportation, loading, unloading etc, were progressively relaxed, the business was not usual.
- f. As the electrical fault can occur at any time during the life of the unit, the contention that the fault occurred within 3 years of COD due to improper commissioning is incorrect.



- g. The high-demand season is from July to September 2020, and the scheduled annual maintenance was taken only after the concurrence of the beneficiaries and ERLDC. However, an electrical fault occurred during the COVID – 19 affected period, the same necessitated an additional 35 days. This circumstance could not have been anticipated, and no amount of preparedness could have tackled this issue.
- h. Thus, the loss of availability during August 2020 and September 2020 was beyond the reasonable control of and the same is akin to Force Majeure, and the provision of achieving season-wise target availability may be relaxed.

### **Hearing dated 30.06.2023**

11. The case was again heard on 30.06.2023 and after hearing the parties, the Commission vide RoP in hearing dated 30.06.2023, reserved the order in the matter and directed petitioner to submit information regarding monthly availability of each unit in 2020 – 21, fault analysis report and trend of transmitters, shaft temperature, bearing temperature, lubrication level, lubrication temperature, event logger, disturbance recorder etc, pertaining to 23.07.2020 and 24.07.2020, details of tripping of unit 4 since its COD and reasons thereof, availability of spares, particularly rotor, bearing, LP gen coupling bolt, sequence of actions taken from 05.09.2020 to 02.10.2020 regarding restoration of unit, the delay claimed on account of LP gen coupling bolts and reasons thereof, while the same was ordered on 28.09.2020 and the unit was restored on 02.10.2020, reasons and justification for postponement of scheduled overhauling from March, 2020 to November / December, 2020 rather than preponing combustion modification to March, 2020, approval of competent authority and communication exchanged with beneficiaries regarding the preponement overhauling etc,

12. In response, the Petitioner vide affidavit dated 04.08.2023 has submitted certain information. The gist of the submissions made by the Petitioner, in this regard, is as follows:

- (a) The month-wise availability, along with the generation of each Unit (195 MW) in FY 2020-21, are detailed in the table as follows:



<b>FY 2020-21</b>	<b>U#1 (Unit#3)</b>		<b>U#2 (Unit#4)</b>	
<b>Month</b>	<b>Generation (MU)</b>	<b>Availability Factor* %</b>	<b>Generation (MU)</b>	<b>Availability Factor* %</b>
Apr-20	34.579	100	96.649	100
May-20	99.155	97.07	92.349	89.26
Jun-20	104.795	100	94.463	91.90
Jul-20	111.780	94.59	83.900	74.55
Aug-20	108.971	100	0	0
Sep-20	97.145	98.75	0	0
Oct-20	97.923	93.33	99.970	94.86
Nov-20	100.250	99.77	101.980	100
Dec-20	111.661	100	111.980	100
Jan-21	99.073	87.84	114.170	99.61
Feb-21	106.095	100	102.680	97.21
Mar-21	134.727	99.01	140.390	100

\* Including RSD (Due to Low demand owing to Lockdown on spread of COVID-19)

(b) The petitioner has submitted the fault analysis report, which was prepared by M/s Powertest Asia and recommended for threading out the rotor from the stator and carrying out all other electrical diagnostic tests on the stator & rotor. It was also submitted that due to the limited storage capability of DCS systems, operational parameters could not be maintained for a longer duration; thus, such information is not available for the said dates. However, event logger and SOE, consisting of trends for HPT Front Shaft Vibration(X, Y), HPT rear Shaft Vibration(X, Y), IPT Rear Shaft Vibration(X, Y), Generator Front Shaft Vibration(X, Y), Generator rear Shaft Vibration(X, Y), Exciter rear Shaft Vibration(X, Y), Exciter front Shaft Vibration(X, Y), LPT front Shaft Vibration(X, Y), LPT Rear Shaft Vibration(X, Y), Shaft temperature, level, load etc. at time of Unit#4 tripping, which was saved at the time of tripping for analysis, are available with petitioner and are furnished. However, in regard to shaft vibration (Z transmitter), it was submitted that such a transmitter is not available.

(c) The stabilization of the generating station takes some time, and outages of unit 4 since COD till 24.07.2020 due to various reasons are as below :

<b>Year</b>	<b>No. of Outages</b>	<b>Reasons for Outages</b>
2017-18	23	Tube leakages, Furnace Disturbance, Field Instrument problem etc.



2018-19	19	400/220/132 kV Line External Disturbance, Tube leakages, Furnace Disturbance, PA fan Problem etc.
2019-20	14	Tube leakages, Furnace Disturbance, PA fan problem etc.
2020-21 (upto 24.07.2020)	4	Only outage due to Generator bearing vibration very high (1 no.) and others (3 no.) due to tube leakages etc.

(d) In regard to the availability of spares, including rotor shaft, bearing, LP gen coupling etc, it was submitted that the unit is of 195 MW and TVPI (Turbo Vacuum Pressure Impregnated) design of the Stator, the rotor is a unique and non-standard. As these items are high-value capital equipment and high inventory value thereof, the same was not readily available at the site, and due to unique design & capacity, the same was also not available as a pooled spare at any other NTPC Station. In view of this, a purchase order was placed to OEM, and the rotor reached the site on 05.09.2020. Further, an order for LP-Generator coupling bolts etc., was placed to OEM on 05.08.2020, and the same was delivered to the site on 11.09.2020. All the other bearings of the Turbine and Generator were available at the site before the start of overhauling activities.

(e) In regards to actions taken since 05.09.2020 for restoration of the unit, it was submitted that due to COVID-19, the works were slow in progress. The actions undertaken to assemble the new Generator rotor at the site with the engagement of OEM, are as follows:

<b>Period</b>	<b>Activities</b>	<b>During Normal situation Approx. duration taken (days)</b>	<b>Due to COVID Pandemic, SOP's etc, Duration (days)</b>	<b>Additional days taken after considering overlapping period</b>
06-09-2020 to 07-09-2020	Placement of rotor from transporter lorry to TG hall unloading bay (front side), further placement & lifting of rotor from TG hall unloading bay to TG Floor elevation (Unit# 4 side).	1	2	1



08.09.2020 to 09.09.2020	Unpacking of new rotor and positioning of rotor for testing, IR tests, shaft journal & coupling face paint removal etc.	1	2	1
10.09.2020 to 12.09.2020	Retaining rings varnish removal, DPT & UT (NDT tests) of retaining rings & Air Tightness test of rotor to check leakages in Gas path, IR, Field Resistance, RSO AC Impedance test etc.	1	3	2
13.09.2020 to 15.09.2020	Generator rotor coupling face matching, Placement of rotor at position / Thread-In of rotor shaft in stator etc.	1.5	3	1.5
16.09.2020 to 20.09.2020	Generator rotor coupling facial run out, Generator Bearing placement, Air Gap measurement, Magnetic axis offset checking etc.	2	5	3
21.09.2020 to 24.09.2020	Installation bottom end seal positioning, Oil detector, Exciter rear end bearing placement, LP rotor spigot matching at Generator end & Generator rotor spigot matching at exciter end, Exciter Rotor placement at position etc. carried out at site by OEM specialized manpower	2	4	2
24.09.2020 to 28.09.2020	Generator – Exciter Alignment & coupling activities, run-out etc, and additional work of Machining, reaming & honing of 14 no. of Coupling bolts with 0.02 mm accuracy for alignment of new Generator rotor at CIPET, Hazipur.	2.5	5	2.5
29.09.2020 to 01.10.2020	Electrical site testing and PI (Polarization Index) value etc. for new Generator rotor	2	3	1
<b>Total</b>		<b>13</b>	<b>27</b>	<b>14</b>
02.10.2020	Unit #4 synchronized.			





- (f) In regards to the delay claimed w.r.t. LP Gen Coupling bolts, the petitioner reiterated the submissions made in the original petition and also mentioned that these were required to be machined for coupling & alignment of the new Generator rotor with high accuracy. As, no local vendor was available at that time due to the pandemic situation, machining 14 No. Coupling bolts of standard sizes was to be carried out at CIPET, Hazipur, wherein, 7 no. bolts (including 01 no. loose) were already sent to CIPET for machining and the PO for 8 no. of bolts was placed to CIPET vide email dated 28.09.2020.
- (g) In regard to the postponement of overhauling, it was submitted in the LGBR meeting held in December 2019 that the overhauling of unit 4 was planned for March 2020. However, the same was not finalized in the 166<sup>th</sup> OCC meeting of ERPC. Further, in view of the COVID – 19, the OCC meetings were not held in April 2020 and May 2020. The Combustion Modification works were awarded to M/s L&T MHI Power Boilers Pvt. Ltd, wherein, the contract agreement was signed on 22.01.2020, and pre-shutdown activities may take around 4-6 months i.e. baseline test with Pre-fabrication works of ducts, Pre-assembly of burner blocks, site mobilization etc, receipt of material envisaged at the site by June, 2020 etc, and for completion of CM within 35 days available for scheduled overhaul and the material and manpower required for overhauling, particularly in view of the COVID – 19, the unit overhaul was planned in October, 2020 i.e. low demand period. The same was circulated to beneficiaries in the 170<sup>th</sup> OCC meeting held in August 2020. However, due to restrictions of COVID–19, all activities, including supplies and erection work of Combustion Modification, were also affected. Thus, the execution of Combustion Modification Works couldn't be done during the forced overhauling period of August 2020 – September 2020.

13. The Respondent, WBSEDCL vide affidavit dated 16.10.2023, submitted its reply to the additional information dated 04.08.2023 furnished by the petitioner and the brief of the same is as follows:



- i. The matter was taken up on 30.06.2023. However, the answering respondent could not appear and put forth submissions. Considering the principles of natural justice, the Commission may recall the proceedings and grant an opportunity to hear the answering respondent and other respondents also for effective adjudication.
- ii. In spite of the fact that overhaul was scheduled in March 2020, the petitioner has, without any basis, unnecessarily dragged and planned in October 2020. If the overhauling had been carried out in March 2020, the subject issue could not have arisen. Thus, the onus for delay in the execution of works lies with the generating company. Accordingly, the petition is not maintainable.
- iii. No supporting documents were submitted for 10 10-day delay claimed in fault identification. The details regarding the fault removal, whether the old rotor was sent to OEM or not etc, were not provided. However, as the unit was restored with a new rotor received a month subsequent to the subject fault, it is understood that the old rotor was not repaired within that time, and the same is due to the failure of the petitioner to execute overhauling works in March 2020.
- iv. The information regarding the temperature, vibration, etc., is necessary for examination. The petitioner could have stored/downloaded the DCS system data before it was overwritten by new data, but the petitioner failed to do so.
- v. The timelines specified in the letter of award for the completion of works and delivery of new rotor, coupling bolts etc, were not mentioned.
- vi. The activities performed within the plant boundary and the delay on account of COVID-19 are not convincing.
- vii. No supporting documents have been submitted to substantiate the claim that the planned overhauling from March 2020 was postponed to October 2020. Further, as per the documents, it is noted that the scheduled overhauling was changed by the petitioner on its own, which resulted in the failure of the machine. Thus, the impact of COVID-19 on the execution of work cannot be considerable.
- viii. On account of non-supply of power, the answering respondent purchased 187.95 MUs during the subject period, which led to an additional burden on it.



ix. In case the deemed availability is considered for recovery of AFC in high demand season, it may encourage for deferment of scheduled maintenance and lead to failure of the machine and loss of generation thereof.

14. The Petitioner, KBUNL, vide affidavit dated 09.12.2023, has filed a rejoinder to the reply of Respondent, WBSEDCL, and it is noted that primarily the petitioner has reiterated submissions made earlier and made certain additional submissions. A brief of the additional submissions made are as follows :

- i. The matter was being heard multiple times, and the respondent chose not to appear on these occasions; it has symbolically waived its right to be heard and amounts to acceptance of the petitioner's claim.
- ii. The CM work requires conducting baseline tests with pre-fabrication works of ducts, pre-assembly of burner blocks along with site mobilization before the Unit shutdown, and the same may take around 4-6 months to accommodate and complete the CM works within the overhauling period, the overhauling was planned in October 2020.
- iii. There was no communication gap between the petitioner and BHEL / Power Test Asia.
- iv. The faulty rotor was to be either repaired at the site or replaced with a new rotor, and the same requires decoupling and threading out of the rotor through OEM or a specialized agency. However, as the repair at the site was possible, it was required to be done at OEM. Further, considering the time involved in awarding the contract for decoupling, thread out, transportation from site to OEM, repair at OEM, transportation from OEM to site, coupling, rotor test etc, new rotor and LP gen. coupling bolts were ordered to OEM on 06.08.2020 on 05.08.2020, respectively and new rotor and LP Gen couplings reached the site on 05.09.2020 and 11.09.2020, respectively.
- v. The Respondent, WBSEDCL, has partly availed its share from unit 3, even during the high season period and could have availed balance share and ensured power to customers.



## **Analysis and Decision**

15. Considering the above and the documents available on record, it is noted that the petitioner has mainly submitted as under:

- i. The Unit 4 (195 MW), MTPS stage II, was tripped on 24.07.2020 on 'Gen. Shaft Vibration Very High' and while restoring the unit, it was again tripped on 'Gen. Shaft Vibration Very High'. On primary inspection and analysis of data, as it was decided to carry out testing of the generator, the unit was taken under shutdown and testing was planned for 25.07.2020. However, due to COVID-19 restrictions on the movement of material and manpower, the test was conducted on 05.08.2020, and it was established that field winding was open and one pole was grounded. However, as the stator design is Turbo Vacuum Pressure Impregnated (TVPI) and the rotor is unique, its repair can be done at OEM works (BHEL, Haridwar) only, but not at the site. Accordingly, to revive unit – 4, purchase requisition and NIT for the generator rotor were done on 06.08.2020.
- ii. Considering the above and the unavailability of the rotor on an immediate basis, to utilize the available time, the petitioner has decided to pre-pone the over-hauling works scheduled in October 2020. In this regard, M/s BHEL, vide email dated 07.08.2020, submitted its mobilization plan, but, citing the unavailability of accommodation for balance mobilization, requested the petitioner to arrange the same. However, due to the quarantine of COVID-19, the petitioner could not arrange the same immediately but was able to do so after 4 days.
- iii. After witnessing the inspection of the new rotor, the Material Dispatch Clearance Certificate (MDCC) was issued on 29.08.2020, and the rotor was dispatched from OEM (BHEL, Haridwar) on 31.08.2020 and reached the site on 05.09.2020. However, due to COVID-19 and restrictions thereof, the planned over-hauling got extended by 23 days, beyond the stipulated period of 35 days and also, machining of 14 no. of LP Gen coupling bolts was necessitated to carry out CIPET, Hajipur. The unit was restored on 02.10.2020.
- iv. In view of the above, the petitioner claimed that the delay caused in carrying out testing and overhauling was beyond reasonable control of the petitioner, and the same is akin to Force Majeure as per Regulation 3(25) of the 2019



Tariff Regulations. On these grounds, the Petitioner sought relaxation in the provision of achieving season-wise target availability, separately, in 2020 – 21 for MTPS stage II and had prayed for deemed availability under Regulation 3 (25) read with Regulations 76 and 77 of the Tariff Regulations, 2019 for unavailability period of the unit.

- v. On observing the inconsistency in the deemed availability period sought, the petitioner had submitted that out of the total outage period of the Unit (70 days from 24.07.2020 to 02.10.2020 the overhauling period was 35 days, and the same was not claimed for deemed availability. Out of the remaining 35 days, deemed availability of the Unit has been sought for 33 days i.e. 10 days i.e. 26.07.2020 to 05.08.2020 – delay in establishing the exact reason for generator fault and 23 days i.e. 09.09.2020 to 02.10.2020 – delay in mobilization of manpower by BHEL, delay in witnessing rotor test at BHEL, Haridwar and delay in transportation of new rotor from OEM to site, delay in machining of LP gen coupling bolts.
16. In this context, following are noted :
- i. With regard to a specific query of the Commission on the availability of spares, including rotor shaft, bearing, LP Gen coupling bolt etc, it was submitted by the Petitioner that these items being high-value inventory capital equipment, were not readily available at the site. Further, as the units are having unique capacity (195 MW which is not common in Indian System) and unique design, such spares were also not available as pooled spare. However, we feel that the petitioner, keeping in view the uniqueness of unit and its design, should have been more careful in maintaining such spares, so that they are readily available at the time needed.
  - ii. Petitioner has submitted that considering the unavailability of local vendors, machining 14 No. Coupling bolts of standard sizes was to be carried out at CIPET, Hazipur, which resulted delay in receiving the 8 no. of bolts causing delay in restoration of unit. However, it is noted that the petitioner had first placed an order for the machining of 6 no. of bolts and obtained the same, but order for the machining of 8 no. of bolts was placed on 28.09.2020 while the



unit was restored on 02.10.2020. It is obvious that delay in receiving of matching Gen coupling bolts is because, the order for the same was placed so late (four days before restoration), and for such delay in placing the award, no valid reasons have been submitted by the petitioner.

- iii. In response to the query on the sequence of actions taken along with supporting documents for the restoration of the unit from 05.09.2020 (date of receipt of the rotor at the site) to 02.10.2020 (date of unit restoration), including completion of O/H works, the petitioner submitted that it has carried out various activities associated with rotor and the same necessitated additional time on account of COVID-19 restrictions. However, no supporting documents have been submitted to substantiate the same. Further, it is noted that the petitioner has carried out overhauling works pertaining to Boiler & auxiliaries, ESP, Turbine and auxiliaries, Generator, Electrical system, Control and instrumentation, Offsite areas, Ash handling systems, etc, during the subject period.

17. With respect to the claim of the petitioner that the delay caused in carrying out testing and overhauling was beyond the reasonable control of the petitioner and same is akin to Force Majeure as per Regulation 3(25) of 2019, Tariff Regulations, it is noted that the Regulation 3 (25) of the 2019 Tariff Regulations is as follows:

*'(25) 'Force Majeure' for the purpose of these regulations means the events or circumstances or combination of events or circumstances including those stated below which **partly or fully prevents the generating company or transmission licensee to complete the project within the time specified in the Investment Approval**, and only if such events or circumstances are not within the control of the generating company or transmission licensee and **could not have been avoided, had the generating company or transmission licensee taken reasonable care or complied with prudent utility practices:***

*(a) Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or*

*(b) Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or*

*(c) Industry wide strikes and labour disturbances having a nationwide impact in India; or*

*(d) Delay in obtaining statutory approval for the project except where the delay is attributable to project developer;'*



18. Considering the above, it is noted that Regulation 3(25) regarding Force Majeure, is mainly dealing with the delay involved in under-construction projects but not for the condonation of delay in operation of the existing plant. Thus, the claim of the petitioner cannot be considered under Regulation 3 (25), 2019, Tariff Regulations.

19. In respect of the delay claimed on account of COVID-19 and restrictions thereof, it is noted that the order of the Ministry of Home Affairs, dated 24.3.2020, clearly exempted the units and services relating to generation, transmission and distribution from the lockdown. The relevant extract of the above order is as under:

*“1. Office of the Government of India, its Autonomous / Subordinate Offices and Public Corporations shall remain close.*

**Exceptions:**

*Defence, central armed police forces, treasury, public utilities (including petroleum, CNG, LPG, PNG) (disaster management, **power generation** and transmission units, post offices, National Informatics Centre, Early Warning Agencies*

.....

*4. Commercial and private establishment shall be closed down.*

**Exceptions:**

....

*g. **Power generation, transmission and distribution units and services***

*...”*

20. Further, the Ministry of Power, Govt. of India vide letter dated 25.03.2020 had recognized that power generation is an essential service for securing smooth and uninterrupted power flow across and within the States, and operations of inter-State generating stations are critical for maintaining the power supply. Accordingly, in order to provide the uninterrupted operation of generators, the Ministry had also asked the concerned authorities to provide relevant permissions to such generating stations. The relevant extract of the said letter is as under:

*“.....*

*2. **Power Generation is an essential service** for securing smooth and uninterrupted power flow across and within the states. In the current scenario of*



*COVID-19 outbreak and nationwide lockdown announced by Hon'ble Prime Minister, there will be need to ensure uninterrupted power generation.*

*3. The power generation utilities under Ministry of Power, Ultra Mega Power Projects (UMPPs) and Independent Power Plants (IPPs), hereafter referred to as "interstate power generating stations", supply inter-state electricity to the grid. Hence, their operation are critical for maintaining power supply across the country.*

*4. In order to provide uninterrupted operation of "interstate power generating stations", the following support is requested from your office.*

*a.....*

*b.....*

*c. Waiver from section 144, Nationwide Lockdown, Curfew or any other limitation on number of people to gather in locations like ash pond, raw water intake, Power Generating Stations and other related locations where it may be required for operation and maintenance activities of generation and associated equipment  
....."*

21. In this regard, it is noted that Govt. of Bihar also acknowledged that power generation and electricity are exceptions to the restrictions of COVID-19.

22. It is also noted that the Commission vide order dated 20.01.2022 in Petition No. 594/MP/2020 had not considered COVID-19 as a Force Majeure event, as the units and services relating to generation, transmission and distribution were exempted from the restrictions imposed on account of the COVID lockdown vide Ministry of Home Affairs' order dated 24.03.2020.

23. The Petitioner has prayed for grant of deemed availability under Regulation 76 and Regulation 77 of the 2019 Tariff Regulations. Regulations, 76 and 77 of the 2019 Tariff Regulations provide 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.*

*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”*

24. As regards the exercise of Power to Relax, the APTEL vide its judgment dated 25.3.2011 in appeal No. 130/2009, RGPPL Vs. CERC & Anr. observed 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. In regard to the Power to Remove Difficulty, in our considered view, the power under this regulation can be exercised only to remove difficulty in effecting the Regulations but not to remove difficulty caused by the application of the Regulations.

25. In light of the above deliberations and facts on record, 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 and burden the beneficiaries with additional costs. Thus, the Commission is not inclined to invoke powers vested under Regulations 76 or 77 of the 2019 Tariff Regulations and is unable to allow deemed availability claimed by the petitioner for 33 days (10 days i.e. 26.07.2020 to 05.08.2020 and 23 days i.e. 09.09.2020 to 02.10.2020) with respect to unit 4 of MTPS Stage II.

26. The Petition No. 220/MP/2021 is disposed of in terms of the above discussions and findings.

**Sd/  
(P. K. Singh)  
Member**

**Sd/  
(Arun Goyal)  
Member**

**Sd/  
(I. S. Jha)  
Member**

**Sd/  
(Jishnu Barua)  
Chairperson**

