MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION BHOPAL

Sub: In the matter of Petition to avail Special Allowance for Unit No. 3 (210 MW) of PH-2, SGTPS, Birsinghpur under proviso 30 of MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 {RG-26(IV) of 2020}.

<u>ORDER</u>

(Date of Order: 17th. January, 2024)

M.P. Power Generating Co. Ltd.

Shakti Bhawan, Rampur, Jabalpur – 482008 Petitioner

V/s

M.P. Power Management Co. Ltd.

Shakti Bhawan, Rampur, Jabalpur – 482008 Respondent

Shri Navneet Mathur (CE) and Shri Salil Choudhary (SE) appeared on behalf of petitioner.

Shri Manoj Dubey, Advocate and Shri Himanshu Kripal Sahu, appeared on behalf of respondent.

- M.P. Power Generating Company Limited (hereinafter called Petitioner or MPPGCL) has filed the subject petition seeking approval to avail "Special Allowance" in tariff for 210 MW Unit No. 3 of PH-2, SGTPS, Birsinghpur from the date of completion of its Useful life (i.e from 28.02.2024) by enabling the provision under Regulation 30 of the MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 (hereinafter called the "the Regulations, 2020"). M.P. Power Management Company Limited (MPPMCL) is the respondent in this matter.
- 2. The Petitioner is a wholly owned company of Government of MP, engaged in generation of electricity in the State of Madhya Pradesh. MP Power Management

- Company Ltd. is the Holding Company for all the three DISCOMS of Madhya Pradesh engaged in purchase of bulk power on behalf of DISCOMS.
- 3. The Petitioner entered into Power Purchase Agreements (PPAs) with MP Tradeco (now MPPMCL) on 29.11.2006 for existing power stations and on 04.01.2011 for its other new/ongoing Thermal Power Stations. Further, the first amendment to the Power Purchase Agreement (PPA) dated 29.11.2006 had been signed on 18.07.2017. This First Amendment to PPA provides term period till retirement/ decommissioning of all Thermal and Hydel Power Stations of MPPGCL listed in the agreement dated 29.11.2006. Aforesaid PPAs provide that the tariff payable by Tradeco (now MPPMCL) to Genco shall be as determined by the State Commission.
- 4. In the subject petition, Petitioner broadly made the following submission
 - i. MPPGCL is having various Thermal and Hydro power stations/projects in the state of Madhya Pradesh. Sanjay Gandhi Thermal Power Station (SGTPS) is one such power station of the petitioner located at Birsinghpur, Dist Umaria, Madhya Pradesh. Power House wise breakup and date of Commissioning (COD) of respective units of Thermal Power Station is detailed as below:-

Power	Unit	Capacity in MW	CoD	Age in Years	Make of	Make of
House	No.	III IVI VV		in Years	TG Set	Boiler
PH-1	1	210	26-Mar-93	30	BHEL	ABL
	2	210	27-Mar-94	29	BHEL	ABL
PH-2	3	210	28-Feb-99	24	BHEL	ABL
	4	210	23-Nov-99	23	BHEL	ABL
PH-3	5	500	28-Aug-08	14	BHEL	BHEL
To	Total 1340					

- ii. MPPGCL has submitted the following chronology of events in the matter:
 - a) MPPGCL has submitted that the Central Electricity Authority, New Delhi has issued new guidelines for R&M in February, 2020 named as "Guidelines for Renovation and Modernization/ Life Extension Works of Coal / Lignite based Thermal Power Stations".
 - b) The new guidelines are meant for R&M/LE programme to improve plant operational performance, availability/ reliability, efficiency and emission reduction in light of new MoEF&CC notification, enable plant for flexible operation and extend the life of plant by further period of 15 20 years. The

main objective of R&M of power generating units is to make the Unit operating as well equipped with modified / augmented equipment/components/systems, with a view to improve their operating performance, reliability and availability to the original design values, reduction in maintenance requirements, ease of maintenance and enhanced efficiency, meeting the latest emission levels and achieving flexibility in generation.

- c) The CEA's guidelines for R&M issued in Feb., 2020, provide the segregation of whole R&M works in two parts i.e. the responsibility of "Consultant" and "Executing Agency" as under: -
 - (i). Consultant(s): "To assist the utilities to carry out RLA, Energy Audit, Preparation of DPR, Bid Specifications, selection of executing agency, implementation & performance evaluation"
 - (ii). Executing Agency:- "To carry out the field work"
- d) Considering the learning & apprehensions, MPPGCL requested CEA to give concurrence in the matter for adaption of the modified procedure for carrying out the comprehensive R&M works at SGTPS Birsinghpur by choosing Methodology of Swiss Challenge mode. In response, the CEA vide letter No.2/3/R&M/TPRM/CEA/2021/968 dated 18.11.2021, has conveyed that CEA has no objection regarding adoption of mentioned procedure in reference letter by MPPGCL to carry out R&M works through Swiss Challenge Mode, if concerned Electricity Regulatory Commission accords its approval to MPPGCL regarding the same.
- e) Accordingly, in compliance to CEA directives issued vide letter dated 18.11.2021 and based on past experiences, MPPGCL filed a Petition No. 42 of 2022 under Regulations 67 & 68 of the Regulations,2020, wherein MPPGCL has requested before Commission to permit MPPGCL to carry out Comprehensive R&M /LE of Unit No. 1, 2, 3 & 4 of PH-1&2 of SGTPS, Birsinghpur, with following changes in procedure: -
 - (i). Permit deviation from CEA guidelines towards selecting single agency instead of two different agencies i.e. Consultant(s) and Executing Agency, to carry out Comprehensive R&M/LE of Unit #1, #2, #3 & #4 of PH-1&2 of SGTPS, Birsinghpur.
 - (ii). Permit adoption of methodology of Swiss Challenge Mode for selection of bidders for R&M works.

MPPGCL has also submitted that after exploring the cost estimate for Comprehensive R&M/LE of Unit No.1, 2, 3 & 4 of PH-1&2 of SGTPS, Birsinghpur, MPPGCL shall submit separate petition to accord approval for

- capital expenditure and to allow its impact on generation Tariff determined for the control period FY 2019-20 to FY 2023-24 & onwards.
- f). The Commission in its order dated 26.08.2022 in Petition No. 42 of 2022 gave following observations:
 - "12 In view of the above, the Commission noted that prayer made by petitioner is beyond provisions of Tariff Regulations hence, can't be considered. However, the petitioner may approach the Commission for approval of R&M proposal with Detailed Project Report for Renovation and Modernization works for SGTPS Birsinghpur (Unit No. 1, 2, 3 & 4) in accordance to the Regulation 29 of the Regulations, 2020. The Commission shall examine the Renovation and Modernization proposal at that time in light of the provisions under applicable Regulations.

With the aforesaid observations, the subject petition is found not admissible. Hence, disposed of."

- g). All efforts made by MPPGCL in last 5 years for carrying out Comprehensive Repair & Modernization /Life Extension works in Unit No.1, 2, 3 & 4 of PH-1&2 of SGTPS, Birsinghpur, had gone in vain.
- iii. MPPGCL thereafter opted for availing Special Allowance for Unit No. 1 & 2 (210MW of PH-1 SGTPS, Birsinghpur and filed petition No. 11 of 2023 before Commission on 24.03.2023. After various round of hearings, the Commission vide order dated 27.07.2023 granted Special Allowance for FY 2023-24 & onwards.
- iv. The Unit No. 3 (210MW) of SGTPS, Birsinghpur shall complete its useful life in Feb.' 2024 as detailed below.

Unit No.3, PH-2, SGTPS, Birsinghpur.							
CoD	CoD Date of completion of						
Useful life							
28-Feb-99	27-Feb-24						

v. Due to ageing and non-execution of any major R&M activities, the performance of this unit is below norms but not in depleted condition. The year wise performance is detailed in the table below: -

Year	PAF	Gross		Sp. Oil	Heat	Aux.
	(%)	Generation	(%)	ml/kWh	Rate	Cons.

		(MU)			Kcal/kWh	(%)
2018-	68.10%	991	53.9%	0.66	2707	10.55%
19						
2019-	73.04%	732	39.8%	1.49	2751	10.53%
20						
2020-	74.80%	1092	59.4%	0.92	2749	9.77%
21						
2021-	60.20%	1057	57.5%	0.67	2790	10.41%
22						
2022-	68.24%	1232	67.0%	0.57	2719	9.32%
23						
MPERC	75%		75%	1.00	2700	10.00%
Norms						

5. With the above broad submissions, petitioner has prayed the following:

"To allow MPPGCL to avail "Special Allowance "in Tariff for Unit No.#3 (210MW) of PH-2, SGTPS, MPPGCL, Birsinghpur from the respective date of completion of its Useful life and onwards by enabling the provision under Regulations 30 of MPERC Regulations, 2020 {RG-26(IV) of 2020}"

- 6. The subject petition was listed for motion hearing on 5th December, 2023, wherein the petition was admitted. Vide Order dated 5th December, 2023 the Petitioner was directed to serve copy of petition to Respondent. The Respondent MPPMCL was directed to file their response on the petition within 15 days, thereafter. The Petitioner was asked to file rejoinder within a week, thereafter.
- 7. At the next hearing in this matter held on 9th January, 2024, the Commission having heard both the parties, reserved the case for order.
- 8. By affidavit dated 22nd December, 2023, the Respondent (MPPMCL) in its reply has submitted the following:
 - i. By way of instant petition, the Petitioner, inter-alia, seeks Special Allowance for remaining period of 33 days of FY 2023-24 of Tariff Block Period 2019-24 @ Rs. 9.5 Lakhs/MW/Year for its Generating Unit No. 3 (210MW) Phase 2 of SGTPS, Birsinghpur to the tune of Rs. 1,804 Crores under Regulation 30 of the MPERC (Terms & Conditions for determination of Generation Tariff) Regulations, 2020.

- ii. Regulation 30.1 of the said Regulations very clearly provides that for grant of Special Allowance, the applicable operational norms shall not be relaxed. To the admission of the Petitioner, the Unit is performing below the norms. The Plant Availability Factor (PAF) of the Unit has been 68.10%, 73.04%, 74.80%, 60.20% and 68.24% for FYs 2018-19, 2019-20, 2020-21, 2021-22 and 2022-2023 respectively as against the prescribed norm of 75% Similarly, the Plant Load Factor (PLF) has been 53.9%, 39.8%, 59.4%, 57.5% and 67.0% for FYs 2018-19, 2019-20, 2020-21, 2021-22 and 2022-2023 respectively as against the prescribed norm of 75%.
- iii. It is submitted that the Commission may consider the low performance of the Unit in terms of its PAF and PLF in view of Regulation 30.1 of the MPERC (Terms & Conditions for determination of Generation Tariff) Regulations, 2020 in granting the Special Allowance as sought by the Petitioner.
- iv. It is further submitted that, as against the balance plant life of 33 days pleaded by the Petitioner, the actual plant life is 32 days only as on 27th February, 2024 considering the CoD to be 28th February, 1999.

Commission's Observations and Findings:

- Subject petition has been filed by M.P. Power Generating Company Limited for approval to avail "Special Allowance" in tariff for 210 MW Unit No. 3 of PH-2, SGTPS, Birsinghpur from the date of completion of its Useful life by enabling the provision under Regulation 30 of the MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020.
- 10. On perusal of the subject petition, the Commission has observed the following:
 - i. Sanjay Gandhi Thermal Power Station having five generating units of total installed capacity of 1340 MW. Date of Commercial Operation (CoD) and completion of useful life of 25 years of Unit No. 3 of PH-2 is as below:

Unit No.3, PH-2, SGTPS, Birsinghpur.					
Date of CoD Date of completion of Useful					
28-Feb-1999	27-Feb-2024				

- ii. Meanwhile, the Central Electricity Authority (CEA) issued new guidelines for R&M of old thermal units in February, 2020 named as Guidelines for "Renovation & Modernization /Life Extension Works of Coal/Lignite based Thermal Power Stations." The petitioner then approached the CEA for approval of adaptation of the modified approach for carrying out the R&M works at SGTPS Birsinghpur using the Swiss Challenge Methodology, as mentioned in the above guidelines. In response, vide letter dated 18.11.2021, the CEA stated that it has no objections to MPPGCL using the procedure mentioned in the reference letter to carry out R&M works through Swiss Challenge Mode, subject to approval of the Commission.
- ii. Accordingly, MPPGCL filed a Petition under Regulations 67 & 68 of the Regulations, 2020, wherein MPPGCL requested the Commission to permit deviations in R&M guidelines issued by CEA in the year 2020 to carry out Comprehensive R&M of Unit No. 1, 2, 3, & 4 of PH-1&2 of SGTPS, Birsinghpur.
- iv. Vide Order dated 26.08.2022, the Commission had observed that the prayer made by petitioner was beyond the scope of the Regulations,2020, hence, not considered. The petitioner was asked to approach the Commission for approval of R&M proposal with Detailed Project Report for R&M works for SGTPS Birsinghpur (PH-1&2) in accordance to the Regulation 29 of the Regulations, 2020.
- v. The petitioner has submitted that since 2017-18, it had made efforts to carry out Comprehensive Repair & Modernization/ Life Extension works in the Units of SGTPS, Birsinghpur, however, all the efforts made in last five years were ineffective. Therefore, the petitioner has decided to approach the Commission to avail Special Allowance in Unit 3 of SGTPS PH-2, after the completion of its normal service life of 25 years under the Regulations, 2020.
- 11. Respondent (MPPMCL) in its reply to the subject petition has submitted that Commission may consider the low performance of the Unit No. 3 in terms of its PAF and PLF, in view of Regulation 30.1 of the MPERC Regulations, 2020 in granting the Special Allowance as sought by the Petitioner.
- 12. The subject petition is filed for approval of "Special Allowance" under Regulation 30 of the Regulations, 2020. Therefore, let us look into the provisions under Regulation 30 of the Regulations, 2020:

"30. Special Allowance for Coal-based Thermal Generating station:

30.1 In case of coal-based thermal generating station, the generating company, instead of availing R&M may opt to avail a "special

allowance" in accordance with the norms specified in this Regulation, as compensation for meeting the requirement of expenses including renovation and modernization beyond the useful life of the generating station or a unit thereof, and in such an event, upward revision of the capital cost shall not be allowed and the applicable operational norms shall not be relaxed but the special allowance shall be included in the annual fixed cost:

Provided that such option shall not be available for a generating station or unit thereof for which renovation and modernization has been undertaken and the expenditure has been admitted by the Commission before commencement of these Regulations, or for a generating station or unit which is in a depleted condition or operating under relaxed operational and performance norms:

Provided further that special allowance shall also be available for a generating station which has availed the special allowance during the tariff period 2013-14 to 2015-16 or 2016-17 to 2018-19 as applicable from the date of completion of the useful life.

- 30.2 The special allowance admissible to the generating station shall be @ Rs. 9.5 lakh/MW/year for the tariff period 2019-24.
- 30.3 In the event of granting special allowance by the Commission, the expenditure incurred or utilized from special allowance shall be maintained separately by the generating station and details of same shall be made available to the Commission as and when directed to furnish details of such expenditure.

- 13. As per the aforementioned provisions of the Regulations, 2020, the generating company may avail to receive "Special Allowance" as compensation for meeting out the requirement of expenses including renovation and modernization beyond the useful life of the generating station or a unit thereof.
- 14. Therefore, the petitioner has decided to avail "Special Allowance" beyond the useful life of the generating units instead of carrying out the Comprehensive Renovation and Modernization of its Unit No. 3 of PH-2 of SGTPS Birsinghpur.
- 15. With regard to completion of useful life of Unit No. 3 of the SGTPS PH-2, Birsinghpur, it is observed that the Unit No. 3 will complete its useful life of 25 years on 27.02.2024. Accordingly, the petitioner has filed the subject petition

- seeking Special Allowance of Unit No. 3 for balance period of 33 days only in current FY 2023-24 (i.e., w.e.f. 28.02.2024 to 31.03.2024).
- 16. Regarding the eligibility of Special Allowance, the Regulations, 2020 provides that the generating company, instead of availing R&M may opt to avail a "Special Allowance" in accordance with the norms specified in the Regulations, as compensation for meeting the requirement of expenses including renovation and modernization beyond the useful life of the generating station or a unit thereof, and in such an event, upward revision of the capital cost shall not be allowed and the applicable operational norms shall not be relaxed.
- 17. With regard to accounting of expenditure from special allowance, Regulation 30.3 provides that the expenditure incurred or utilized from "Special Allowance" shall be maintained separately by the generating station and details of same shall be made available to the Commission as and when directed to furnish details of such expenditure.
- 18. In view of the above, the petitioner is entitled to avail "Special Allowance" for Unit No. 3 of (210MW), PH-2, SGTPS Birsinghpur. Accordingly, following "Special Allowance" is allowed for the aforesaid unit for FY 2023-24:

Name	Installed Capacity in MW	Special Allowance @ Rs. Lakhs /MW/Year	Sp. Allow. Per Year in Rs. Crs.	No. of Days eligible for Sp. Allow.	Prorata Sp. Allow. In Rs. Crs.
Unit No.	210	9.5	19.95	33	1.804

- 19. Further, the Regulations, 2020 provide that "Special Allowance" opted in accordance with Regulation 30 of the Regulations, 2020 shall be recovered separately and shall not be considered for computation of working capital.
- 20. MPPGCL is allowed to recover the abovementioned amount towards "Special Allowance" for FY 2023-24 without any interest in six equal monthly installments, subject to following conditions in terms of Regulation 30 of the Regulations, 2020:
 - (a) Upward revision of the capital cost shall not be allowed;
 - (b) The applicable operational norms shall not be relaxed:
 - (c) The Special Allowance shall be included in the annual fixed cost:

- (d) The expenditure incurred or utilized from Special Allowance shall be maintained separately by the generating station and details of same shall be made available to the Commission as and when directed to furnish such details of expenditure.
- 21. With the aforesaid observations and directions, the subject petition is disposed of.

(Prashant Chaturvedi)
Member

(Gopal Srivastava) Member (Law) (S. P. S. Parihar) Chairman