PUNJAB STATE ELECTRICITY REGULATORY COMMISSION SITE NO. 3, BLOCK B, SECTOR 18-A, MADHYA MARG, CHANDIGARH

Petition No. 25 of 2024 Date of Order: 05.12.2024

Petition for the approval of True-up of Fuel & Power Purchase Adjustment Surcharge (FPPAS) for FY 2023-24 under Section 62 & 86 of the Electricity Act, 2003 read with Regulation 47 of PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulation, 2022 along with its amendments and Regulation 55 of PSERC (Conduct of Business) Regulations, 2005 along with its amendments

In the matter of:

Punjab State Power Corporation Limited, The Mall, Patiala.

.....Petitioner

Commission:

Sh. Viswajeet Khanna, Chairperson: Sh. Paramjeet Singh, Member

ORDER:

 The present petition has been filed by Punjab State Power Corporation Limited Punjab State Power Corporation Limited (PSPCL) for True-Up of Fuel & Power Purchase Adjustment Surcharge (FPPAS) for FY 2023-24 calculated in accordance with the provisions specified in the PSERC MYT (2nd amendment) Regulations, 2023 and PSERC Conduct of Business (6th Amendment) Regulations, 2023.

- The submissions made by PSPCL in the Petition are summarized as under:
 - I. Section 62, clause (4) of the Electricity Act 2003 states that no tariff or part of any tariff may ordinarily be amended, more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified. The National Tariff Policy, 2016 also directs that all uncontrollable costs should be speedily recovered from consumers so that the future consumers may not get burdened with past costs.
 - II. The Commission has notified the PSERC (Conduct of Business) (6th Amendment) Regulations, 2023 and the PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) (2nd Amendment) Regulations, 2023 on 2nd June 2023. The petition for True-Up of Fuel & Power Purchase Adjustment Surcharge (FPPAS) for FY 2023-24 has been made in accordance with the provisions specified in the above Regulations and has been filed for approval of the Commission. After the notification of methodology specified in the amended Appendix -7 of the PSERC Conduct of Business (6th Amendment) Regulations, 2023, PSPCL has been calculating the FPPAS on a monthly basis for the month from April 2023 onwards.
 - III. PSPCL has submitted that the annual accounts for FY 2023-24 are under process of finalisation and requested that any deviation in the fuel and power purchase costs after

finalisation of the accounts may be allowed to be adjusted during the annual tariff petition to be filed on or before 30th November 2024. Further, it has put sincere efforts in compiling the information for True-Up of FPPPAS for FY 2023-24, to ensure that these be free from any material errors and are in line with the relevant MYT Regulations & of Business **Regulations** issued Conduct by the Commission. In case any deficiency arises owing to the information. PSPCL has requested collation of the Commission to accept the current Petition, however appropriate measures shall be taken by PSPCL to rectify such deficiencies so as to provide the desired information to the Commission.

IV. PSPCL has submitted that the Commission in its tariff order for FY 2023-24 had approved power purchase and Fuel Cost as under:

Table 1 Approved Power Purchase for FY 2023-24

Power Purchase	Power Purchase Cost	Cost per unit	
Quantum (MU)	(Rs. Crore)	(Rs./unit)	
57,772	25,741	4.46	

Table 2 Approved Fuel (Generation cost) for FY 2023-24

Generation Quantum (MU)	Fuel Cost (Rs. Crore)	Cost per unit (Rs./unit)
4,352	1,771	4.07

For the purpose of computing the FPPAS, the combined Power Purchase Cost from all Sources including fuel cost of own thermal stations is computed as shown in table below:

Table 3 Combined Power Purchase and Fuel cost approved for FY 2023-24

Energy Quantum	Cost (Rs. Crore)	Cost per unit (Rs./unit)
(MU)		
62,124	27,512	4.43

The actual power purchase cost of PSPCL during FY 2023-24 is as below:

Table 4 Monthly Power purchase cost for FY 2023-24

Month	Energy (MU)	Amount (Rs. Crore)	Cost per unit (Rs./unit)
Apr-23	4,818.75	1,757.25	3.65
May-23	4,736.18	1,942.88	4.10
Jun-23	5,174.87	2,101.16	4.06
Jul-23	4,752.37	1,997.71	4.20
Aug-23	5,713.89	2,502.70	4.38
Sep-23	5,076.02	2,178.02	4.29
Oct-23	4,143.73	1,877.02	4.53
Nov-23	3,748.22	1,735.26	4.63
Dec-23	4,330.79	1,969.02	4.55
Jan-24	5,103.54	2,487.32	4.87
Feb-24	4,705.91	2,186.66	4.65
Mar-24	4,915.76	2,100.03	4.27

The fuel cost (calculated on normative basis) incurred by PSPCL during FY 2023-24 is as below:

Table 5 Monthly Generation Cost for FY 2023-24

Month	Energy (MU)	Amount (Rs. Crore)	Cost per unit (Rs./unit)
Apr-23	598.86	230.17	3.84
May-23	409.48	156.46	3.82
Jun-23	657.07	230.90	3.51
Jul-23	633.39	230.49	3.64
Aug-23	847.16	300.43	3.55
Sep-23	604.87	212.30	3.51
Oct-23	755.92	255.93	3.39
Nov-23	449.97	154.55	3.43
Dec-23	740.56	252.57	3.41
Jan-24	792.32	283.02	3.57
Feb-24	725.07	261.31	3.60
Mar-24	625.58	252.92	4.04

The fuel cost submitted above has been computed in accordance with the norms fixed by the Commission and is

without prejudice to PSPCL's claim for allowing fuel cost based on relaxed parameters due to vintage nature of PSPCL's thermal generating stations.

V. The monthly incremental fuel and power purchase cost incurred as against the approved cost in Tariff Order for FY 2023-24 is tabulated below:

Month Tariff Order		Cost incu	Cost incurred during FY 2023-24		
Approved Cost (Rs./unit)		Power Purchase (Rs./unit)	Fuel Cost (Rs./unit)	Combined Cost (Rs./unit)	Cost 'C' (Rs./unit)
122	i	ii	iii	iv	v = iv - i
Apr-23	4.43	3.65	3.84	3.67	-0.76
May-23	4.43	4.10	3.82	4.08	-0.35
Jun-23	4.43	4.06	3.51	4.00	-0.43
Jul-23	4.43	4.20	3.64	4.14	-0.29
Aug-23	4.43	4.38	3.55	4.27	-0.16
Sep-23	4.43	4.29	3.51	4.21	-0.22
Oct-23	4.43	4.53	3.39	4.35	-0.08
Nov-23	4.43	4.63	3.43	4.50	0.07
Dec-23	4.43	4.55	3.41	4.38	-0.05
Jan-24	4.43	4.87	3.57	4.70	0.27
Feb-24	4.43	4.65	3.60	4.51	0.08
Mar-24	4.43	4.27	4.04	4.25	-0.18

Table 6 Monthly Incremental per unit cost for FY 2023-24

The incremental cost amount for fuel and power purchase is as below:

Month	Energy 'A' (MU)	Bulk Sale 'B' (MU)	Incremental Cost 'C' (Rs./unit)	Incremental Cost (Rs. Crore)
	i	ii	iii	$iv = (i - ii) \times iii$
Apr-23	5,417.62	296.15	-0.76	-389.26
May-23	5,145.65	136.63	-0.35	-174.64
Jun-23	5,831.94	302.82	-0.43	-237.60
Jul-23	5,385.76	180.11	-0.29	-151.63
Aug-23	6,561.05	200.50	-0.16	-99.30
Sep-23	5,680.89	145.80	-0.22	-122.24
Oct-23	4,899.66	232.81	-0.08	-35.11
Nov-23	4,198.19	50.33	0.07	30.28
Dec-23	5,071.35	7.34	-0.05	-24.22
Jan-24	5,895.86	19.97	0.27	158.83
Feb-24	5,430.98	5.47	0.08	42.83
Mar-24	5,541.34	13.30	-0.18	-100.79

Table 7 Monthly Incremental Cost for FY 2023-24

The incremental transmission cost for FY 2023-24 is as below:

Table 8 Incremental Monthly Transmission Charges for FY 2023-24

Month	Transmission Charges incurred 'D' (Rs. Crore)	Transmission Charges approved 'E' (Rs. Crore)	Incremental Transmission Charges 'D-E' (Rs. Crore)
Apr-23	271.16	272.80	-1.63
May-23	261.88	272.80	-10.92
Jun-23	302.30	272.80	29.51
Jul-23	281.52	272.80	8.73
Aug-23	295.85	272.80	23.05
Sep-23	320.96	272.80	48.16
Oct-23	295.82	272.80	23.02
Nov-23	320.38	272.80	47.59
Dec-23	288.68	272.80	15.89
Jan-24	340.64	272.80	67.84
Feb-24	316.72	272.80	43.92
Mar-24	285.22	272.80	12.43

(Rs. Crore)

The total incremental cost is as under:

Table-9 Total Incremental Cost for FY 2023-24 (Rs. Crore)

Month	Incremental Fuel & Power Purchase Cost '(A - B) × C'	Incremental Transmission Charges 'D - E'	Total Incremental Cost '(A - B) × C + (D - E)'
	i Shimme	ii	iii = i + ii
Apr-23	-389.26	-1.63	-390.89
May-23	-174.64	-10.92	-185.56
Jun-23	-237.60	29.51	-208.09
Jul-23	-151.63	8.73	-142.90
Aug-23	-99.30	23.05	-76.24
Sep-23	-122.24	48.16	-74.08
Oct-23	-35.11	23.02	-12.08
Nov-23	30.28	47.59	77.87
Dec-23	-24.22	15.89	-8.34
Jan-24	158.83	67.84	226.67
Feb-24	42.83	43.92	86.75
Mar-24	-100.79	12.43	-88.36

The amount of FPPAS (%) calculated on monthly basis for FY 2023-24 has been tabulated below:

Month	Total Incremental Cost (Rs. Crore)	Revenue realisable as per ABR (Rs. Crore)	FPPAS (%)
	i	ii	iii = i / ii × 100
Apr-23	-390.89	3,030.14	-12.90
May-23	-185.56	2,965.55	-6.26
Jun-23	-208.09	3,266.13	-6.37
Jul-23	-142.90	3,077.41	-4.64
Aug-23	-76.24	3,764.77	-2.03
Sep-23	-74.08	3,273.07	-2.26
Oct-23	-12.08	2,766.76	-0.44
Nov-23	77.87	2,459.34	3.17
Dec-23	-8.34	3,001.29	-0.28
Jan-24	226.67	3,479.45	6.51
Feb-24	86.75	3,338.89	2.60
Mar-24	-88.36	3,272.12	-2.70

Table 10 Month	y FPPAS (%) for FY 2023-24
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VI. The monthly FPPAS amount turned out to be negative for the first seven months of FY 2023-24 i.e., till October 2023. The methodology allows for pass through of only the "increase in cost of power, supplied to consumers, due to change in Fuel cost, power purchase cost and transmission charges with reference to cost of supply approved by the Commission". Therefore, PSPCL has not levied any FPPAS to its consumers as computed for the above months.

For the month of November 2023, the FPPAS came out to be positive which was not levied as there was a considerable negative amount computed for the previous 7 months. Therefore, in the interest of the consumers of Punjab, PSPCL adjusted the positive figure for November 2023 in the cumulative negative figure till October 2023 and requested the Commission to allow the same.

Thereafter, for December 2023, the FPPAS again came out to be negative while for the next two months, i.e., January 2024 and February 2024, the FPPAS came out to be positive. For March 2024, the FPPAS have come out to be negative. PSPCL had also filed petition no. 17 of 2024 to amend the methodology with the intent of allowing the adjustment of the accrued amount in the cumulative negative FPPAS in the same year.

- VII. PSPCL has not levied any FPPPAS to its consumers during FY 2023-24 since the cumulative balance (after adjusting amount recovered, if any) at the end of each month of FY 2023-24 was negative.
- VIII. PSPCL has requested the Commission as follows:
 - a. Admit the petition seeking approval of true up of FPPAS for FY 2023-24;
 - b. Allow any deviation in amount on account of finalisation of annual accounts for FY 2023-24 including carrying cost, to be adjusted in the true up of ARR of FY 2023-24 which shall be filed along with the annual tariff petition for FY 2025-26 on or before 30th November 2024;
 - c. Allow incremental fuel cost based on relaxed parameters due to the vintage nature of PSPCL's thermal generating stations;
 - d. Condone any inadvertent omissions/errors/shortcomings and permit PSPCL to add/change/modify/alter this filing and make further submissions as may be required during the course of these proceedings;
- 3. The Commission vide order dated 29.05.2024 directed PSPCL to provide Fuel Cost Parameters/Calculations as per G-24 format, Power Procurement Cost as per D-2, D-3 formats of

PSERC MYT Regulations, 2022 and details of increase in transmission cost.

- 4. PSPCL vide letter dated 04.07.2024 submitted details of month wise FPPAS calculated for FY 2023-24, which included month wise values of all components of the FPPAS formula as per the PSERC (Conduct of Business) (6th amendment) Regulations 2023. PSPCL further submitted that the total incremental cost for the month of March 2024 was submitted as Rs. (-)88.36 Crore and FPPAS was calculated as (-)2.70%. However, owing to the finalization of accounts, the fuel cost has undergone revision for the month of March 2024 from Rs. (-)88.36 Crore to Rs. 2.40 Crore and consequently the FPPAS worked out to be 0.07%. The cumulative balance for FY 2023-24 comes to Rs. -704.49 Crore. PSPCL requested the Commission to admit the additional submission for modification of the amount of FPPAS for the month of March 2024 and that of cumulative value for FY 2023-24 while truing up of FPPAS.
- 5. Further, vide letter dated 19.07.2024 PSPCL submitted the G-24 format (Fuel Cost Parameters/Calculations), and D-2, D-3 formats (Power Procurement details). PSPCL submitted that the transmission charges have increased for FY 2023-24 (predominantly from the month of Nov 2024) as compared to FY 2022-23 due to the implementation of GNA Regulations, 2022 w.e.f. 01.10.2023. These regulations replaced the LTA/MTOA with General Network Access (GNA) independent of tie-ups/PPAs executed by the DICs. While notifying the GNA Regulations, 2022, the Central Commission included the BBMB quantum in the deemed GNA quantum computed for Punjab. The deemed GNA quantum for Punjab has been worked out as

5497 MW based on the actual drawl of the State during the period of FY 2018-19 to FY 2020-21. The earlier, LTA/MTOA quantum for the State of Punjab was considered around 4300 MW for apportionment of ISTS charges, which was based on actual LTA / MTOA tie-ups/power purchase Agreements (PPAs) executed by PSPCL. The BBMB share of around 1132 MW was not included in this LTA/MTOA quantum of 4300 MW, as the O&M charges for BBMB were separately being paid by the BBMB partner states to BBMB. Accordingly, PSPCL filed a petition No. 284/MP/2023 before the CERC for exclusion of drawl of BBMB, from the GNA quantum and the same still is pending before the CERC.

- 6. Vide Order dated 26.07.2024, PSPCL was asked to submit clarifications on the following points:-
 - Reasons for excess price of coal considered by PSPCL for March 2024 in respect of GHTP as Rs. 9270/MT against the coal cost of about Rs. 5500/MT in other months.
 - PSPCL to submit the fuel cost formats with consideration of actual parameters instead of normative parameters.
 PSPCL was also directed to publish a public notice for inviting objections/ suggestions from the public/ stakeholders. The petition was fixed for hearing as well as public hearing on 04.09.2024.
- PSPCL vide letter dated 28.08.2024 submitted its reply as under
 - Due to the following payments made to coal companies i.e.
 CCL, BCCL on account of Performance Incentive and Unutilised ITC on Mining and Statutory charges, the coal

issue rate for the month of March 2024 increased as per details given under:

- a. Payment of Performance Incentive of Rs. 19.58 Crore to M/s BCCL, Rs. 36.08 Crore & Rs. 24.31 Crore to M/s CCL in the month of March 2024.
- b. Unutilized ITC on mining & statutory charges of Rs.
 42.26 Crore, booked during March 2024.

PSPCL has been calculating the monthly FPPAS on the basis of norms adopted by the Commission for various parameters such as SHR, transit loss of coal, specific oil consumption, auxiliary consumption at thermal plants and T&D losses.

Further, some change in the data was observed owing to the finalization of accounts resulting in a change in the calculation of month wise incremental cost. The revised monthly incremental cost on the basis of updated data is tabulated as under:

21/1	FP	PAS Amount (Rs. Crore	
Month	Initially submitted with Petition	As per Additional Submission	As per final adjustments
Apr-23	-390.89	-390.89	-98.46
May-23	-185.56	-185.56	-151.14
Jun-23	-208.09	-208.09	-178.10
Jul-23	-142.90	-142.90	-140.66
Aug-23	-76.24	-76.24	-237.76
Sep-23	-74.08	-74.08	-75.79
Oct-23	-12.08	-12.08	19.27
Nov-23	77.87	77.87	45.18
Dec-23	-8.34	-8.34	-20.49
Jan-24	226.67	226.67	217.18
Feb-24	86.75	86.75	69.41
Mar-24	-88.36	2.40	-5.88
Total	-795.25	-704.49	-557.25

PSPCL has further submitted that these calculations are being submitted without prejudice to PSPCL's claim to actual fuel cost based on relaxed norms for its vintage plants.

PSPCL has further submitted as under:

I. The Commission is allowing performance parameters for its GGSSTP and GHTP Thermal Plants on the basis of those specified in the Central Electricity Regulatory Commission's (Terms and Conditions of Tariff) Regulations. The norms as adopted for the generating stations of PSPCL have gravely prejudiced it and there is an under-recovery of legitimate costs and expenses to this extent. A comparison of the fuel cost as submitted and allowed by the Commission is also tabulated below:

Period	Submitted by PSPCL	Approved by PSERC
FY 2020-21	668	556
FY 2021-22	1,389	1,234
FY 2022-23	3,331	2,821

Comparison of submitted & approved Fuel Cost

- II. PSPCL has been praying for actual/relaxed norms for its generating stations in almost every tariff petition whereas the Commission has been approving the norms as per CERC Tariff Regulations. The operating parameters like consumption of coal, oil & auxiliary power and Station Heat Rate are affected adversely mainly due to the operation of these units at partial load & frequent start/stop and various reasons discussed in the succeeding paras.
- III. The running of both the stations is regulated by SLDC so as to maintain the required frequency of the system as per demand. The units are forced to operate at partial loads or are shut down, which is beyond the control of the generating stations resulting in low Plant Load Factor (PLF) which further effects the operating parameters such as Station Heat Rate, Auxiliary Power and Oil Consumption.

- IV. The effect of part load running and frequent unit start/stop on parameters viz Station Heat Rtae, Specific Oil Consumption and auxiliary Consumption is as below:
- a. <u>Station Heat Rate (SHR)</u> The SHR gets badly affected due to the following reasons:
 - ii) Ageing of Units -

GGSSTP Units III and IV are approximately 36 years old, while Units V and VI are around 32 years old since commissioning, whereas GHTP Units are comparatively younger than GGSSTP Units. It is a universal fact that the performance of any mechanical equipment does not remain consistent over the usable life of equipment due to wear and tear during normal operation. The main equipment at GGSSTP & GHTP is of BHEL design and make. BHEL acknowledges the variation in the heat rate of the turbine due to ageing as specified in its Performance Guarantee Test Report. On the basis of this report, the deterioration of SHR as on 31.03.2024 is as under:

S. No.	Unit	UoM	U-3	U-4	U-5	U-6
1	Date of Commissioning	-	31-03-88	29-01-89	29-03-92	30-03-93
2	Date of Commercial run		25-09-88	01-08-89	29-09-92	14-12-93
3	Design Turbine Heat rate	kCal/kWh	1985.00	1985.00	1985.00	1985.00
4	Design Boiler efficiency	%	88.18	88.18	88.10	88.10
5	Design Unit heat rate	kCal/kWh	2251.08	2251.08	2253.12	2253.12
6	No. of months after commissioning	Nos.	432	423	384	372
7	Total ageing tolerance	%	26.00	25.46	23.12	22.40
8	Heat Rate of unit calculated after ageing tolerance	kCal/kWh	2836.36	2824.20	2774.04	2757.82
9	Average Heat Rate	kCal/kWh		2798	3.11	

GGSSTP units

S. No.	Unit	UoM	U-1	U-2	U-3	U-4
1	Date of Commissioning of units	-	08-07-98	06-12-98	27-02-08	13-11-08
2	Date of Commercial run	-	26-06-99	04-01-99	16-10-08	25-01-10
3	Design Turbine Heat rate	kCal/kWh	1985.00	1985.00	1951.00	1951.00
4	Design Boiler efficiency	%	88.65	88.65	88.35	88.35
5	Design Unit heat rate	kCal/kWh	2272.00	2272.00	2241.00	2241.00
6	No. of months after commissioning	Nos.	308	303	193	184
7	Total ageing tolerance	%	18.76	18.46	11.86	11.32
8	Heat Rate of unit calculated after ageing tolerance	kCal/kWh	2698.23	2691.41	2506.78	2494.68
9	Average Heat Rate	kCal/kWh		2589	9.34	

GHTP:

The deterioration in Heat Rate on account of the ageing of units as worked out above for all units' age up to 31st March 2024, clearly states that the norms ought to be relaxed for these plants.

iii) Partial load operation of the units and number of start/stop of units: The demand curve of Punjab is bell shaped which means that peak requirements occur in the middle of the year. Power from GGSSTP and GHTP is scheduled during the peak paddy season and for rest of the year, plants are kept as back up since these fall on the higher side of the Merit Order. With the operation of these plants at a low PLF, it is almost impossible to meet the approved heat rate norms which are very stringent.

Further, the accurate calculation of heat rates separately for Unit-1 to 3 and Unit-4 is not possible due to the reason that some amount of energy is consumed commonly for all the Units, such as FO tank heating, PRDS charging, running of Circulating Water Pumps etc.

Therefore, it would be better if a single value of SHR is approved for the station as a whole.

The Commission has fixed norms as per the Central Commission' tariff regulations, but in other states relaxation is given in SHR due to similar factors affecting their power stations as under:

ANTY PEO				
Name of State Thermal Plant	Station Heat Rate (kCal/kWh)			
KTPS (Units 1 to 7) 110/210/195 MW	2561.70 - Approved for 2022-23 by Rajasthan Tariff Order 2022-23 2625 - Approved for 2021-22 by Gujarat Tariff Order 2021-22			
Ukai (Units 3 – 5) 200/210 MW				
Gandhinagar (3-5) 210 MW	2625 - Approved for 2021-22 by Gujarat Tariff Order 2021-22			

In view of the above, PSPCL has requested the Commission to fix a more relaxed SHR value rate by giving due consideration for old units.

b. Secondary Fuel Oil Consumption - Oil is consumed for unit startups and for maintaining flame stability during partial load operations or when some problem arises like poor coal quality or equipment failures. Oil consumption is directly related to the frequency of unit start-ups and stoppages.

The Commission has fixed norms as per the Central Commission' tariff regulations but in other states relaxation is given in oil consumption on the above said factors as shown below:

Name of State Thermal Plant	Oil consumption (ml/kWh)			
Ukai (Units 3 - 5)	1.00 - Approved for 2021-22 by Rajasthan			
200/210 MW	Tariff Order 2022-23			
Gandhinagar (3-5)	1.00 - Approved for 2021-22 by Rajasthan			
210 MW	Tariff Order 2021-22			
PTPS	1.00 - Approved for 2022-23 by Haryana			
210 MW	Tariff Order 2022-23			

In view of the above, PSPCL has requested the Commission to fix a higher specific oil consumption rate by giving due consideration to the above specified reasons.

- c. Auxiliary Power Consumption (APC) In case of backing down generation, even though the load is reduced, the units operate at partial load and still require power to run the minimum essential standby auxiliaries to safeguard the main equipment of the station. Consequently, the APC percentage is higher during lowload operations.
 - a. The Commission has fixed norms for SHR based on the Central Commission's tariff regulations. However, other states have provided relaxations for SHR due to similar factors affecting their power stations as under:

Name of State Thermal Plant	Auxiliary consumption (%)			
Ukai (Units 3 - 5)	9.00% - Approved for 2021-22 by Gujarat			
200/210 MW	Tariff Order 2021-22			
Gandhinagar (3-5)	9.00% - Approved for 2021-22 by Gujarat			
210 MW	Tariff Order 2021-22			
PTPS	9.00% - Approved for 2022-23 by Haryana			
210 MW	Tariff Order 2022-23			
KTPS (Units 1 to 7)	9.65% - Approved for 2022-23 by Rajasthan			
110/210/195 MW	Tariff Order 2022-23			
STPS (Units 1 to 6)	9.80% - Approved for 2022-23 by Rajasthan			
250 MW	Tariff Order 2022-23			

PSPCL is responsible for meeting the diverse demand of electricity in Punjab, which it does from different sources. The major sources from which PSPCL procures power are:

- Central Generating Stations
- Own Thermal and Hydel Generating Stations
- IPP's
- Co-Generation Plants
- Banking Arrangements
- Traders

i) According to the Merit Order Dispatch, power is purchased from the above sources and also from the PPAs signed with IPP's in Punjab for cost-effective and economic viability to PSPCL/ its consumers. This strategy often leads to the backing down of PSPCL's own generating stations which leads to higher operating parameters. However, when the plant operates at more than 80% PLF, its operational parameters improve significantly as depicted below:

S. No.	Operating Parameters	Unit	Year				
	GGSSTP		2009-10	2010-11	2011-12	2012-13	
1	Plant load factor	%	91.11	88.04	86.41	83.05	
2	Auxiliary Consumption	%	8.14	8.11	8.44	8.37	
3	Specific overall oil consumption	ml/kWh	0.665	0.649	0.648	0.625	
4	Heat Rate (GCV based)	kCal/kWh	2645	2566	2564	2538	
	GHTP						
S. No.	Operating Unit		Year				
5. NO.	Parameters	Unit	2010-11	2011-12	2012-13	2013-14	
1	Plant load factor	%	84.79	94.31	89.53	82.70	
2	Auxiliary Consumption	%	8.08	7.87	7.93	8.21	
3	Specific overall oil consumption	ml/kWh	0.580	0.369	0.270	0.325	
4	Heat Rate (GCV based)	kCal/kWh	2417	2402	2324	2396	

- ii) From the above table, it is clear that even if GGSSTP units have higher PLF, even then performance parameters fixed by the Commission would not be achievable. For GHTP, if PLF was higher, then the parameters fixed by the Commission would be achievable. The Commission fixes unachievable norms for performance parameters like Generation, SHR, Auxiliary Consumption and Specific Oil Consumption whereas norms for performance should be based on the national average rather than be based on the top performers.
- iii) In every tariff order while truing up or approving the fuel cost, the Commission relies on the fact that PSERC MYT Regulations have adopted the CERC norms for the generating

station's performance parameters but fails to adopt the provision for part load compensation. To clarify further, the regulation 49 (C) of the CERC Tariff Regulations 2019.

PSPCL has also submitted the treatment of norms for performance parameters in the State of Haryana and Gujarat.

PSPCL has prayed to the Commission to similarly adopt regulations pertaining to performance parameters corresponding to the past performance of the generators of PSPCL and also allow the compensation norms for part load operations of these generating units.

- 8. The petition was taken up for hearing as well as for public hearing on 04.09.2024. Nobody appeared from the public and no objection has been received. PSPCL, vide Order dated 06.09.2024, was directed to provide a reply to the following observations of the Commission:
 - i. PSPCL is consistently updating/revising the submission of data. PSPCL to submit the formats in respect of the revised information.
 - ii. PSPCL to provide the latest status of the matter for exclusion of the BBMB drawl from GNA along with the transmission cost of BBMB power paid by it as transmission charges and O&M cost of the inter-state transmission lines paid to the BBMB during FY 2023-24.
 - iii. In the Tariff Order for FY 2024-25, the Commission had directed PSPCL to consider the generation and cost of generation from GVK as its own plant like GGSSTP and GHTP from the next Petition onwards. Accordingly, PSPCL to exclude GVK from power purchase and submit its generation/

cost of generation as per its plants from the date of its acquisition by PSPCL.

- **9.** PSPCL vide letter dated 26.09.2024 submitted its reply to the observations of the Commission as under:
 - i. The true up petition was filed on 29th April 2024 based on provisional data as the accounts for FY 2023-24 were not finalized. The same was also reflected in the prayers of the true up petition. The FPPAS calculations based on the data as per the final accounts for FY 2023-24 has now been prepared.
 - ii. CERC had already recognized the peculiar nature of the generation and supply from BBMB and had exempted/excluded the share of BBMB power from the PoC mechanism in the various decisions. [ref. Order dated 28.04.2017 passed in Petition No. L-1/44/2010-CERC; Order dated 09.01.2019 in Petition 16/TT/2019; and Order dated 15.12.2022 in Petition Nos 153/MP/2019. 206/MP/2019, 225/MP/2019 and 291/MP/2019], as such, no transmission charges are received by BBMB for its transmission network supplying power to its partner states under Sharing Mechanism stipulated in CERC Sharing Regulations 2020. BBMB is only receiving the charges directly paid by Punjab and other partner States based on its actual expenditure.

As per prevailing CERC Sharing Regulations 2020, transmission charges are being apportioned among DICs based on their approved GNA quantum, which is 5497 MW for the state of Punjab. Further, GNA quantum of the DICs was calculated by NLDC based on the actual ISTS drawl of the respective states for the last 3 financial years i.e. 2018-19, 2019-20 & 2020-21 including the drawl from the BBMB stations. After the decision of petition no. 284/MP/2023 filed by PSPCL before CERC, the revised reduced GNA quantum of Punjab may be calculated by NLDC.

During the last hearing of the petition No. 284/MP/2023 held on 29.08.2024, CERC directed NRLDC to submit the details of time block-wise schedule from BBMB owned stations to PSPCL for the months of July 2023 and January 2024 along with the time block-wise actual drawl of PSPCL for the same period. The information sought by CERC has been submitted by NRLDC (Grid-India) on 12.09.2024. The matter is now listed for hearing on 17.10.2024.

During the FY 2023-24, an amount of Rs 370.72 Crore has been booked as O&M expenses for Power wing and irrigation wing of BBMB (LC-999) according to the PSPCL share ratio in respective projects. This O&M expense includes Rs. 98.95 Crore for Transmission (LPP/RPP transmission and BTL) and Rs. 271.77 Crore for Generation units. After adjusting the revenue of Rs. 141.62 Crore, net amount of Rs. 229.10 Crore has been paid to BBMB in the FY 2023-24.

iii. PSPCL acquired M/s GVK Power (Goindwal Sahib) Limited in IBC proceeding w.e.f. 07-02-2024 as per NCLT order dated 22-12-2023 through its subsidiary M/s Guru Amardas Thermal Power Limited (GATPL). As per the merger plan, GATPL is to be merged into M/s GVK Power (Goindwal Sahib) Limited. Hence, M/s GVK Power (Goindwal Sahib) Limited is a separate legal entity and will remain so even after the merger of GATPL as per the approved resolution plan and has to prepare its accounts as per Section 128 and 129 of the Companies Act 2013. Further, such accounts are subject to statutory audit also, as Section 139 of Companies Act, 2013 mandates the appointment of an auditor to audit the financial statements of the company. Accordingly, PSPCL accounts for power purchase from GVK under accounts code 70 'Power Purchase' as per terms of PPA and consolidated the accounts of M/s GVK Power (Goindwal Sahib) Limited while preparing its consolidated financial statements as per Ind AS -103 and Ind AS - 110. Hence, treating GVK's generation costs and output as part of PSPCL's own plants in regulatory filings may not align with the fact that GVK is an independent entity with its own liabilities, governance and statutory obligations.

10. The petition was taken up for further hearing on 20.11.2024. After hearing the representative appearing for PSPCL, Order was reserved.

11. Observations and Decision of the Commission

The Commission has examined the averments made in the petition and after hearing the representative of PSPCL decides as follows:

11.1 The Commission observes that PSPCL has filed the petition on 02.05.2024 with a submission that it has a cumulative balance of Rs. (-) 795.25 Crore. On 04.07.2024, PSPCL made a revised submission that the incremental cost of March 2024 has changed and the revised cumulative balance is Rs. (-) 704.49 Crore. Again on 28.08.2024 PSPCL further revised its incremental cost calculations and reflected the cumulative balance as Rs. (-) 557.25 Crore. From the perusal of the balance sheet attached with PSPCL's reply dated 26.09.2024, it is indicated that the balance sheet was finalized and signed on 28.05.2024. However, PSPCL could not finalize the Fuel and Power cost till 28.08.2024 despite the accounts having closed much earlier. PSPCL is directed to be more diligent while calculating the monthly FPPAS to eliminate the frequent revisions as it directly impacts both the consumers as well as the utility financially.

The Commission observes that PSPCL has paid the 11.2 requisite transmission charges of transmission lines pertaining to BBMB power directly to BBMB. At the same time, higher Inter State Transmission System (ISTS) charges have also been paid due to the implementation of CERC (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022 w.e.f. 01.10.2023 wherein deemed General Network Access (GNA) quantum for the State of Punjab has been considered as 5497 MW (with inclusion of BBMB) in place of the earlier 4300 MW considered for apportionment of the ISTS charges. Thus charges on account of BBMB have been imposed twice. The Commission also notes that the matter for revision of transmission charges (exclusion of BBMB power from GNA) is pending before CERC. PSPCL is directed to get the GNA corrected at the earliest. The Commission shall not burden the consumers with the ISTS charges pertaining to BBMB power paid by PSPCL when transmission charges of these lines have already been paid directly to BBMB.

- 11.3 Regarding PSPCL's prayer to allow incremental fuel cost based on relaxed parameters due to the vintage nature of PSPCL's thermal generating stations, the Commission observes that it fixes the norms for various operating parameters of PSPCL's thermal generating stations such as station heat rate, oil consumption, auxiliary consumption etc. in the Tariff Order. Accordingly, the request of PSPCL to allow relaxed norms in this petition is not tenable.
- 11.4 With regard to the issue of consideration of postacquisition power received from GVK as power purchase, even after acquiring M/s GVK Power (Goindwal Sahib) Limited by PSPCL in IBC proceeding w.e.f. 07.02.2024, PSPCL has stated that it has acquired M/s GVK as per NCLT's order dated 22.12.2023 through its subsidiary M/s Guru Amar Das Thermal Power Limited (GATPL). As per the merger plan, GATPL is to be merged into M/s GVK Power (Goindwal Sahib) Limited and will remain a separate legal entity even after the merger of GATPL. Hence, the purchase of power is being treated and accounted for as per PPA with M/s GVK Power (Goindwal Sahib) Limited. The Commission has taken note of the submissions made by PSPCL regarding GATPL being a separate legal entity. However, it is

pointed that Section 62 of the Electricity Act, 2003 provides as under:

"Section 62. (Determination of tariff): --- (1) The Appropriate Commission shall determine the tariff in accordance with the provisions of this Act for –

(a) supply of electricity by a generating company to a distribution licensee:"

Pre-acquisition, GVK has been filing a petition for approval of its ARR and Determination of Tariff for sale of energy generated in terms of Section 62, Section 86 and Section 94 of the Electricity Act 2003 alongwith relevant PSERC Tariff Regulations. Since PSPCL is categorizing power generated from GVK as part of power purchase, it is essential to continue to determine tariff of GVK on an annual basis as per previous practice. Accordingly, it is directed that in line with the mandate provided under Section 62 of the Act, GATPL shall file a separate petition for determination of tariff on an annual basis for the Commission's approval.

11.5 The Commission further observes that PSPCL has not levied any FPPAS on the consumers during FY 2023-24. The Commission also takes note of the fact that the surplus in respect of fuel, power purchase and transmission cost at the end of FY 2023-24 is Rs. 557.25 Crore as projected by PSPCL now. The Commission shall consider and adjust the surplus available with PSPCL during the true-up of FY 2023-24 in the Tariff Order for FY 2025-26 after due prudence check.

The petition is disposed of in light of the above observations and directions.

