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# NOTES AND ABBREVIATIONS

#### In this Petition:

✓ Current Year is defined as Financial Year 2022-23

✓ Previous Year is defined as Financial Year 2021-22

 $\checkmark$  All currency figures used in this Petition, unless specifically stated otherwise, are in Rs. Cr.

Abbreviation	Full Description
AAC	Additional Auxiliary Consumption (power consumed on account of RSD)
A&G	Administrative & General
APCPL	Aravali Power Corporation Private Limited
APC/AEC	Auxiliary Power/Energy Consumption
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
CAGR	Cumulative Average Growth Rate
CERC	Central Electricity Regulatory Commission
CLP	China Light & Power ( Jhazzar Power Limited )
Cr.	Crore
DCRTPP	Deen Bandhu Chotu Ram Thermal Power Plant
DHBVN	Dakshin Haryana Bijli Vitran Nigam Limited
DSI	Dry Sorbent Injection
DSM	Deviation Settlement Mechanism
EA - 2003	The Electricity Act 2003
FGD	Flue Gas Desulphurisation
FPA	Fuel Price Adjustment
FGPS	Faridabad Gas Power Station
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoH	Government of Haryana
GoI	Government of India
HERC	Haryana Electricity Regulatory Commission
HPGCL	Haryana Power Generation Corporation Limited
HWRA	Haryana Water Resources Authority
Ind AS	Indian Accounting Standard
IoB	Indian Overseas Bank
MoC	Ministry of Coal, Government of India
MoD	Merit Order Dispatch
MoEF&CC	Ministry of Environment, Forest and Climate Change
MoP	Ministry of Power, Government of India
MU	Million Units
MYT	Multi Year Tariff
O&M	Operation & Maintenance
PoC	Point of Connection
PFC	Power Finance Corporation
PLF	Plant Load Factor
PNB	Punjab National Bank
PPA	Power Purchase Agreement
PTPS	Panipat Thermal Power Station
REC	Rural Electrical Corporation
RGTPP	Rajiv Gandhi Thermal Power Plant
RSD	Reserve Shut Down
R&M	Repair & Maintenance
SBI	State Bank of India
SCR	Selective Catalytic Reduction
SFC	Secondary Fuel Consumption
SHR	Station Heat Rate
SLDC	State Load Dispatch Centre
SNCR	Selective Non Catalytic Reduction
SOFA	Separated Over Fire Air
SPM	Suspended Particulate Matter
STR	Sewage Treatment Plant
ТО	Tariff Order
UHBVN	Uttar Haryana Bijli Vitran Nigam Limited
WYC	West Yamuna Canal
L	

# LIST OF EVENTS

Date	Description
31.10.2019	HERC notified HERC (Terms and Conditions for Determination of Tariff for
	Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi
	Year Tariff Framework) Regulations, 2019 for the MYT Control Period of FY 2020-
	21 to FY 2024-25.
31.10.2019	As per Regulation 71 under HERC MYT Regulations, 2019, the ARR revenue
	requirement details and Tariff filing for determination of generation tariff for the
	ensuing year should be filed each year by 30thNovember before Haryana
	Electricity Regulatory Commission.
31.01.2022	2nd Amendment in MYT Regulation 2019 issued by Hon'ble Commission
11.2022	The present petition is filed on the basis of the MYT Regulation 2019 and as
	amended thereof by Hon'ble Commission for seeking True-up for FY 2021-22 as
	per First amendment of MYT Regulation 2019 and Mid-year term review & Tariff
	for FY 2023-24 as per 2nd Amendment, of MYT 2019.

# BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION, PANCHKULA

Filing No\_\_\_\_\_

Case No\_\_\_\_\_

IN THE MATTER OF: Filing of the Petition for the approval of True-up of FY 2021-22, Mid-Year (Performance) Review for FY 2022-23& Generation Tariff for FY 2023-24 for HPGCL under Section 61 and 62 of Electricity Act 2003

..... Petitioner

The Petitioner respectfully submits as under: -

- I. The Govt. of India notified the Electricity Act, 2003 (hereinafter referred to as the Act) with effect from 10th June 2003 repealing the Indian Electricity Act-1910, the Electricity (Supply) Act, 1948 and the Electricity Regulatory Commissions Act, 1998. The guiding principles for the power sector have been formulated by the Govt. of India in National Electricity Policy, 2005 and National Tariff Policy, 2016 under the power granted to it under Section 3 of the Electricity Act 2003. As per the National Tariff Policy, the Central Commission would, in consultation with the Central Electricity Authority, notify operating norms from time to time for Generation and Transmission which would be adopted by the SERCs. Under section 61 of the Act, the State Electricity Regulatory Commissions (SERC) are to be guided by principles and methodologies of Central Commission, National Electricity Policy, National Tariff Policy etc. while specifying the terms and conditions of determination of tariff.
- II. The Hon'ble Commission has notified the HERC MYT Regulations 2019 and as amended thereof for the control period FY 2020-21 to 2024-25. Accordingly, HPGCL has submitted the tariff for True up for FY 2021-22 and Mid-Year Review of FY 2022-23& Generation tariff determination for FY 2023-24 as per HERC MYT Regulation, 2019.
- III. Hon'ble Commission didn't carry out Mid-Year Performance Review in its previous tariff orders;

- IV. Accordingly, HPGCL has not submitted the tariff impact for the midyear performance review for FY 2022-23 and the same shall be sought at the time of True up for the said duration. However, performance indicator has been submitted for the year for kind intimation of the Hon'ble Commission only, so the same may be considered under relevant head of tariff while Truing -up.
- Name of the Matter/ Period to which S. No. Appeal No./ Case Ref. Ref. of the order Appellate against which appeal appeal pertains Authority has been preferred APTEL Hon'ble APTEL FY 2019-20 (True Up) & APL 150/2021 1. HERC Order in PRO-76 2020 2021-22 (ARR) of dated 18.02.2021 HERC PRO- 58 of 2019 2. Hon'ble APTEL FY 2018-19 & 2020-21 DFR 216 of 2020 dated order 24.04.2020 Hon'ble APTEL HERC PRO 30 of 2915 FY 2014-15 recovery of APL 306/2016 3. order dt. 31.03.2016 fixed cost 4. Hon'ble APTEL HERC PRO 44 of order FY: 2020-21 (TRUE UP) & APL 163 / 2022 dated 22.02.2022 2022-23 (ARR) **Supreme Court of India** 5. Hon'ble APTEL order dt. FY 2013-14 &ARR for CA 14027-28/2015 Supreme Court 18.09.2015 control period 2014-17 of India 6. Hon'ble APTEL order dated FY 2010-11 CA 4831/2012 Supreme Court 1.03.2012 of India 7. Hon'ble APTEL Order dated FY 2007-08 CA 2862/2010 Supreme Court 31.07.2009 of India **High Court** 8. Hon'ble High MYT Regulations 2012 Provisions of technical & CWP 16027 of 2014 Court of commercial parameters Punjab and Haryana Hon'ble MYT-2019 Provisions of technical & CWP-8622/2022 9. High Court of commercial parameters Punjab and namely 2nd amendment Haryana GCV, ROE, IWC & O&M
- V. The details of appeals filed by HPGCL are tabulated as under:

# VI. HPGCL has opted for appeals against various orders of the Hon'ble Commission and reserve its right to seek relief, if allowed by the Appellate authority in the matter.

Date: .11.2022

Chief Engineer Planning-cum-Regulatory HPGCL, Panchkula (Authorized Signatory)

# **CHAPTER 1**

#### A1 BRIEF PROFILE OF THE COMPANY

- 1. Haryana Power Generation Corporation Ltd. (HPGCL), hereinafter also referred to as the "Petitioner", is a company registered under the Indian Companies Act, 1956 and is wholly owned subsidiary of Government of Haryana.
- HPGCL generating stations were envisaged as the 'Base Load' stations for the State of Haryana and are obligated to supply its entire power only to the Haryana State DISCOMs as per the State Government notification dated 11.04.2008.
- 3. HPGCL presently owns and operate the following power plants in the state as mentioned in Table 1.1 below:

	Installed Consists	Date of	Make/
Particulars	Installed Capacity		
		Commissioning	OEM of
			Generating
Panipat Thermal Power	Unit No-6: 210 MW	31/03/2001	
Station, Panipat	Unit No-7: 250 MW	28/09/2004	BHEL
	Unit No-8: 250 MW	28/01/2005	DILL
	Solar PV:10 MW	01/11/2016	Sterling
			Wilson
DCRTPP, Yamuna	Unit No-1: 300 MW	14/04/2008	
Nagar	Unit No-2: 300 MW	24/06/2008	SEC (China)
RGTPP, Hisar	Unit No-1: 600 MW	24/08/2010	SEC (China)
	Unit No-2: 600 MW	01/03/2011	SEC (China)
Western Yamuna	Power House A		
Canal Hydro Project	Unit No-1: 8 MW	29/05/1986	
(Yamuna Nagar)	Unit No-2: 8 MW	13/06/1986	Enti Limited
	Power House B		Fuji Limited
	Unit No-1: 8 MW	15/05/1987	(Now
	Unit No-2: 8 MW	01/06/1987	acquired by
	Power House C		Voith Hydro
	Unit No-1: 8 MW	27/03/1989	Limited)
	Unit No-2: 8 MW	18/04/1989	
	Power House D		
	Unit No-1: 7.2 MW	16/04/2004	BHEL
	Unit No-2: 7.2 MW	12/05/2004	DILL
	2582.4 MW		
Total Capacity			

#### Table 1-1:Present Install Capacity

 Haryana State is having 25% equity through HPGCL in the joint venture with Govt of Delhi and NTPC for 1500MW Indira Gandhi Super Thermal Power Project (IGSTPP) situated at Jhajjar, Haryana.

5. HPGCL is the nodal agency entrusted by Government of Haryana for facilitating Nuclear
 Power Corporation of India Limited (NPCIL) in setting up 2800 MW (4X700 MW) Nuclear
 Power plant in Fatehabad district of Haryana, presently under construction.

- HPGCL has got in principle approval from Government of Haryana for setting up of 800MW Coal based thermal Power project at DCRTPP Yamuna Nagar. The expected Date of Commissioning of the plant is FY 2028-29.
- 7. Coal Linkage status of HPGCL:

Generating Plant	Coal Company	Existing ACQ (Lac MT)					
RGTPP, Hisar	MCL	9.00					
	NCL	15.00					
	CCL	18.34					
	ECL	4.00					
	TOTAL	46.34					
DCRTPP	CCL	28.00					
PTPS, Panipat	CCL	20.60					
	BCCL	11.60					
	WCL	2.30					
	TOTAL	34.50					
HPGCL as	108.84						

#### Table 1-2: Existing Coal Linkage status of HPGCL Units

#### **CHAPTER 2**

#### A2 PERFORMANCE OF HPGCL STATIONS OVER THE YEAR

8. The current installed capacity of HPGCL is 2582.4 MW. The following sections present the unit-wise historical performance of HPGCL plants.

#### **Gross Generation & PLF**

9. The Historical unit wise annual generation trend of HPGCL Units in MU and PLF in % are tabulated as under:

Generation (MU)								
	2019-20	2020-21 2021-22		2022-23				
				(Upto Sep 22)				
PTPS-6	0.00	51.93	194.79	679.51				
PTPS-7	884.46	619.48	1384.46	996.11				
PTPS-8	1088.33	547.08	1175.70	984.89				
DCRTPP-1	1574.14	1316.67	1013.09	1143.57				
DCRTPP-2	1166.89	1294.75	1597.06	1149.69				
RGTPP-1	768.95	1230.98	2674.31	2086.70				
RGTPP-2	1547.17	405.92	0.00	1188.18				
HPGCL Thermal	7029.94	5466.81	8039.40	8228.66				
WYC Hydel	300.03	242.91	257.40	133.54				

#### Table 2-1:Historical Trend of Generation

10. The Historical trend of HPGCL plant Deemed Plant Load Factor (%) is tabulated as under:

#### Table 2-2:Historical Deemed PLF (%) PAF

Deemed PLF (%)							
	2022-23 (Upto Sep 22)						
PTPS-6	100.00	89.71	95.93	75.01			
PTPS-7	94.41	89.75	98.19	97.26			
PTPS-8	99.80	99.24	91.62	96.23			
DCRTPP-1	100.85	101.12	68.00*	98.30			
DCRTPP-2	65.96	99.55	98.52	98.81			
RGTPP-1	63.36	90.47	96.12	87.80			
RGTPP-2	99.94	47.14	0.00**	51.44			
HPGCL Thermal	87.71	83.21	69.81	82.39			

\*DCRTPP 1 availability affected on account of boiler issue.

\*\* RGTPP2 was not available due to rotor issue.

PLF (%)								
2019-20 2020-21 2021-22 2022-23								
				(Upto Sep 22)				
PTPS-6	0.00	2.82	10.59	73.67				
PTPS-7	40.28	28.29	63.22	90.72				
PTPS-8	49.56	24.98	53.68	89.70				
DCRTPP-1	59.74	50.10	38.55	86.79				
DCRTPP-2	44.28	49.27	60.77	87.26				
RGTPP-1	14.59	23.42	50.88	79.19				
RGTPP-2	29.36	7.72	0.00	45.09				
HPGCL Thermal	29.42	24.86	36.56	74.64				
WYC Hydel	54.74	44.44	47.09	48.73				

Table 2-3: Historical PLF (%)

#### 11. The Historical trend of Unit loading in terms of PLF (%) is tabulated as under:

- 12. The less scheduling of HPGCL units in past is primarily attributed to less demand placed by the beneficiary i.e. Haryana DISCOMs to HPGCL. The same is beyond the control of HPGCL.
- 13. HPGCL plants are facing frequent backing downs/ less scheduling due to the improper procedure of merit order dispatch being adopted by DISCOMs, which is primarily based on marginal cost savings basis and doesn't reflect the true cost of power to consumers.
- 14. The said issue is presently under challenge at Hon'ble APTEL by HPGCL vide DFR 216/2020 & APL 150/2021 to provide equitable field for State Generators which don't have implication of PoC Charges and Losses as identified by this Hon'ble Commission vide order dated 18.02.2021. The same is submitted here for intimation purpose only.
- 15. The frequent backing downs/ Start & Stop operations of HPGCL generating stations not only increase metallurgical failures/ degradation of plants but also severally affects the performance parameters of generating units. Less demand from the DISCOMs on account of marginal cost-based scheduling is the sole reason for Haryana State Based Generators for having low PLF tabulated as under:

	2017-18	2018-19	2019-20	2020-21	2021-22	
APCPL		60.03	56.51	28.96	47.85	54.02
CLP		64.97	60.18	50.52	46.99	67.07
FGPS		22.99	16.51	14.92	25.08	3.93
	PTPS 7&8	47.15	65.71	44.92	26.63	58.45
HPGCL	DCRTPP	65.6	63.2	52.01	49.68	49.66
	RGTPP	44.53	36.65	21.97	15.57*	50.88**

Table 2-4:Historical	Trands of State	Basad Constators	
Table Z-4: Historical	Trends of State	e based Generators	,

\* The lower PLF of RGTPP is due to outage of Unit-2 due to rotor issue. \*\* RGTPP2 only

16. The details of HPGCL Units number of Start and Stop operations due to the instructions of the beneficiary during past years is tabulated as under:

Table 2-5:Details of Start /	Stop of HPGCL Units
------------------------------	---------------------

	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23 (First Half)
PTPS 6	-	2	1	-
PTPS7	12	11	7	-
PTPS 8	10	11	4	-
DCRTPP 1	5	8	3	-
DCRTPP2	5	12	5	-
RGTPP1	6	6	4	-
RGTPP2	8	4	-	-

\*As per Regulation 34 of the HERC MYT 2019, maximum cap for Start/Stop operation is fixed at 07 Nos, and HPGCL is on the verge of crossing the said limit in FY 2021-22 for Unit-7 of PTPS. HPGCL reserves its right to claim for the excess expenditure on account of higher Start/Stop operation, if any, at appropriate time under True up.

# 17. The Historical Trends of the backing down of HPGCL generating stations in % is tabulated as under:

	2019-20	2020-21	2021-22	2022-23 (Upto Sep 22)
PTPS-6	100	86.89	85.34	1.33
PTPS-7	54.13	61.46	34.98	6.54
PTPS-8	50.24	74.25	37.93	6.53
DCRTPP-1	41.11	51.02	29.45	11.51
DCRTPP-2	21.68	50.28	37.75	11.56
RGTPP-1	48.77	67.05	45.24	8.62
RGTPP-2	70.59	39.42	* *	6.35

#### Table 2-6:Historical Trends of Backing Down (%) of HPGCL Units

\*\* RGTPP 2 is not available due to rotor issue

- 18. From the above table, it reveals that HPGCL generating plants have faced excessive backing down in the past and is showing continuous rising trend, touching of alarming level in FY 21-22.
- 19. It is worth to apprise that due to failure of some IPPs to perform their contractual obligations, HPGCL in present year is facing minimum back down and expected to remains on bar as apprised by the beneficiary vide letter dated 25.08.2022. However, the Hon'ble Commission is requested to take note of the directives imparted by Hon'ble Commission for capacity addition in the past, to have fair utilization of HPGCL Units, as being carried in present financial year.
- 20. It is submitted that such significant backing down has adversely impacted HPGCL's operations/ performance in the following ways:
  - I. While HPGCL generating units are placed under Reserve Shut Down (RSD) by DISCOMs, certain essential auxiliaries need to remain on bar for keeping Units available which require continuous drawl of electricity from the grid in absence of its own generation i.e. Additional Auxiliary Consumption. This leads to

increase in O&M charges and in case the same exceeds the normative charges, same needs to be compensated accordingly.

- II. SHR degradation has also been observed on account of running of Units at low loading on account of less demand which needs to be compensated as per MYT Regulation 2019.
- III. The condition of minimum off take of Coal under FSAs leads to coal stock pile up and its handling issues on account of low scheduling is a major challenge. Any loss on account of the same is beyond the control of HPGCL and needs to be pass through.
- IV. Frequent backing down/ Start & Stop operations affects the operational life cycle of plants resulting in higher Repair & Maintenance expenses due to metallurgical degradation/ frequent failures. The same needs to be considered as pass through beyond the permissible limits, if required.
- 21. The reference is invited to HERC order dated 30.03.2021in HERC/PRO 77 of 2020 & HERC/PRO 78 of 2020, wherein at page 142, it was directed as under:

"......Additionally, while resorting to bidding or calling for expression of interest for power procurement the Discoms must ensure that the power under PPAs already approved by the Commission materialises and also the intra-State generator i.e., HPGCL's power plants are scheduled at least up to the critical minimum threshold before considering backing down."

22. The above directive of the Hon'ble Commission needs to be adhered by the DISCOMs in true spirit, so that optimum utilisation of HPGCL units is there in interest of the Consumers. Therefore, the Commission is once again requested to consider the same and any new power added in the kitty of DISCOMs only be scheduled after HPGCL, as the same may be costly on landed cost basis.

#### **Specific Oil Consumption**

23. The historical trends of specific oil consumption of HPGCL Units in ml/KWh are tabulated as under:

Specific oil Consumption (ml/kwh)								
	2019-20	2020-21	2021-22	2022-23 (Upto Sep 22)				
PTPS-6	-	5.17	2.42	1.31				
PTPS-7	0.60	0.96	0.37	0.31				
PTPS-8	0.43	0.92	0.39	0.27				
DCRTPP-1	0.26	0.28	0.24	0.05				
DCRTPP-2	0.55	0.37	0.20	0.11				
RGTPP-1	1.22	0.65	0.32	0.24				
RGTPP-2	0.84	1.70	0.00	1.00				
HPGCL Thermal	0.61	0.68	0.35	0.41				

#### Table 2-7: Historical Trends of Specific Oil Consumption

24. From the Sp. Oil cons. Table no.2.7 read with PLF Table 2.3 along with Start- Stop Table 2.5, it reveals that oil consumption of the generating plant mainly depends upon its scheduling/PLF / no. of start - stop operations. HPGCL reserve its right to seek the compensation on account of oil at the time of True-up, if required.

# Auxiliary Consumption

25. The historical trends of auxiliary consumption of HPGCL Units are tabulated as under:

	Auxiliary Consumption on bar (%)							
	2019-20	2020-21	2021-22	2022-23 (Upto Sep 22)				
PTPS-6	-	9.69	9.33	9.27				
PTPS-7	8.49	8.72	8.95	9.14				
PTPS-8	8.41	8.54	8.81	9.16				
DCRTPP-1	8.10	7.85	8.35	8.45				
DCRTPP-2	8.30	8.08	8.52	8.48				
RGTPP-1	6.49	5.48	5.40	5.62				
RGTPP-2	5.48	5.64	-	5.56				

Table 2-8:Historical Trend of Auxiliary Consumption on Bar

26. It is worth to apprise the Commission that HPGCL Auxiliary consumptions (when on bar) remains within the allowable limits after considering the compensation in Auxiliary consumption as per Regulation no 34 of MYT,2019 which allows compensation on account of low loading.

# **Station Heat Rate**

27. The historical trends of Station Heat Rate (SHR) of HPGCL units are tabulated as under:

	SHR	(Kcal/kw	h)				
	2019-20	2020-21	2021-22	2022-23			
				(Upto Sep 22)			
PTPS-6	-	2537	2541	2546			
PTPS-7	2476	2476	2474	2487			
PTPS-8	2471	2480	2482	2487			
DCRTPP-1	2328	2341	2326	2330			
DCRTPP-2	2333	2342	2332	2333			
RGTPP-1	2476	2431	2398	2389			
RGTPP-2	2442	2461	**	2388			
HPGCL Thermal	2411	2401	2405	2409			

Table 2-9:Historical Trend of Station Heat rate

\*\* RGTPP Unit2 not available due to rotor issue

28. HPGCL has implemented various standard O&M practices including regular monitoring and review by the expert groups & also at various levels of the management. Resultantly, it is able to meet with regulatory norms of SHR despite low scheduling except RGTPP.

## **CHAPTER 3**

# A3 CAPITAL INVESTMENT PLAN FOR HPGCL UNITS

# A. <u>Status of approved Capital Investment Plan vide order dated 22.02.2022.</u>

29. Hon'ble Commission vide its Order dated 22.02.2022 in PRO 44 of 2021 has approved the following Capital Investment Plan as under:

	Capital Expenditure Work	(Rs. Cr.)			
	Year	2021-22	2022-23	2023-24	2024-25
1	Capital Overhauling at WYC	3.50			
2	ERP System and allied works		31.26		
3	Data Centre, Data Recovery centre etc. for ERP Solution		13.67		
4	Balance Payment to R-Infra against EPC contract for RGTPP, Hisar			4.43	5.0
5	Construction of 2 no. Barracks for CISF for RGTPP Hisar	0.72			
6	Installation of CCTV surveillance System in RGTPP Hisar	2.44			
7	Construction of DAV school in power plant colony for RGTPS Hisar				6.87
8	Improvement work of Cooling Towers of RGTPP Unit I & II	6			
9	Replacement of 2 Nos. Stator of BCP of RGTPP Unit I & II		3.16		
10	Up gradation of C&I system for RGTPP Hisar	3	8.0		
11	Procurement of ID fan blades, RGTPP	1.65			
12	Replacement of 03 Nos. Fire Tenders at RGTPP		1.20		
13	Up gradation of hardware and software of PLC at RGTPP, Khedar, Hisar	4	3		
14	Replacement of 2 Nos. (one for each unit) Battery Banks for main plant 2x150 kVA UPS System for Unit 1 &2, RGTPP, Khedar, Hisar	0.41			
15	Procurement of Complete Battery Banks Lead Acid Plante 220V, 2140AH in each Unit (Unit 1&2), RGTPP, Khedar, Hisar		3.80		

 Table 3-1:Approved Capital Investment Plan vide order dated 22.02.2022 in PRO 44 of 2021

	and new set of guide vanes-WYC				
32	Purchase of 01 no. Runner Hub without blades		7		
31	Refurbishment of BFP Cartridge: DCRTPP, Yamuna Nagar	1.55			
30	Up-gradation of existing PLC & SCADA at DCRTPP		2.5488		
29	Township for DCRTPP, Yamuna Nagar		0.35	2.01	
28	Replacement of 8" water lines around the circular road in PTPS, Colony	0.50			
27	Construction of all-weather patrolling track along the peripheral boundary wall at PTPS, Panipat	0.38			
26	Providing rejected Coal (Pucca Floor under 132 KV & 220 KV Lines inside the plant boundary) PTPS, Panipat	0.38			
25	Renovation of centralized AC System of Unit- 7&8, PTPS Panipat		1.80		
24	Replacement of 02 Nos. Fire Tenders at PTPS Panipat	0.433		0.44	
23	Modernization of Boiler Lift for PTPS Unit 8		0.7		
22	Energy Management System PTPS Unit- 7-8		0.70		
21	Up-gradation of PTPS Unit-6 HMI System of pro-control supplied by M/s BHEL			1.50	
20	Replacement of damaged floor and Construction of Roads in PTPS Colony, Panipat as per new norms of Government of Haryana			1.55	
19	Revival of Fire Fighting System of Unit6, PTPS, Panipat			0.60	
18	Purchase of Ion Chromatography system fully automatic PC based, RGTPP Hisar	0.65			
17	Construction of First Aid Centre and additional RCC Roof slab of DG Set house at RGTPP, Khedar, Hisar	0.55			
16	Work for Supply, Erection, Testing and Commissioning of 02 Nos. ABB make unitrol- 6080 Digital Automatic Voltage Regulator (DAVR) for Generator Excitation System and replacement with existing ABB make Unitrol-F DAVR at RGTPP, Khedar, Hisar			1.01	

- 30. There are certain variations in the actual CAPEX incurred vis-à-vis approved expenditure tabulated above is mainly due to the revision in the overhauling schedule/financial prudence and some of the schemes have been completed/surrendered/dropped in the FY 2021-22.
- 31. Accordingly, the schemes completed or surrendered by HPGCL from the above approved table is listed as under:

	Table 3-2. List of schemes completed of dropped					
Sr No	Completed/Dropped Schemes	Amount	Remarks			
1	Capital Overhauling at WYC	3.5	Completed			
9	Replacement of 2 Nos. Stator of BCP of RGTPP Unit I & II	3.16	Dropped			
11	Procurement of ID fan blades, RGTPP	0.83	Partially Completed			
14	Replacement of 2 Nos. (one for each unit) Battery Banks for main plant 2x150 kVA UPS System for Unit 1 &2, RGTPP, Khedar, Hisar	0.41	Completed			
26	Providing rejected Coal (Pucca Floor under 132 KV & 220 KV Lines inside the plant boundary) PTPS, Panipat	0.38	Dropped			
27	Construction of all-weather patrolling track along the peripheral boundary wall at PTPS, Panipat	0.38	Dropped			
30	Up-gradation of existing PLC & SCADA at DCRTPP	2.5488	Completed			

#### Table 3-2: List of schemes completed or dropped

32. In view of the above, the revised schedule of capitalization of the rest of the capital works is presented below for kind consideration and approval of the Hon'ble Commission.

Table 3-3:The revised capital investment plan against the already approved by commission after offsettingdropped /completed scheme

Proposed/Revised CIP						
Sr No	Capital Expenditure Work		(Rs. Cr.)			
	Year	2022-23	2023-24	2024-25		
1	ERP System and allied works		18.45	12.81		
2	Data Centre, Data Recovery centre etc. for ERP Solution		3.94	6.90		
3	Balance Payment to R-Infra against EPC contract for RGTPP, Hisar		4.43	5		
4	Construction of 2 no. Barracks for CISF for RGTPP Hisar	0.71				
5	Installation of CCTV surveillance System in RGTPP Hisar	1.65				
6	Construction of DAV school in power plant colony for RGTPS Hisar			6.87		
7	Improvement work of Cooling Towers of RGTPP Unit I & II			6		
8	Up gradation of C&I system for RGTPP Hisar	3	8.00			
9	Procurement of ID fan blades, RGTPP	0.82				
10	Replacement of 03 Nos. Fire Tenders at RGTPP	1.2				
11	Up gradation of hardware and software of PLC at RGTPP, Khedar, Hisar	4	3.00			

	GRAND TOTAL	115.142		
	TOTAL	18.77	58.792	37.58
26	Purchase of 01 no. Runner Hub without blades and new set of guides vanes-WYC		7	
25	Refurbishment of BFP Cartridge: DCRTPP, Yamuna Nagar	1.55		
24	Township for DCRTPP, Yamunanagar		2.36	
23	Replacement of 8" water lines around the circular road in PTPS, Colony	0.49		
22	Renovation of centralized AC System of Unit-7&8, PTPS Panipat		1.80	
21	Replacement of 02 Nos. Fire Tenders at PTPS Panipat		0.44	
20	Modernization of Boiler Lift for PTPS Unit 8	0.80		
19	Energy Management System PTPS Unit- 7-8		1.22	
18	Up-gradation of PTPS Unit-6 HMI System of pro-control supplied by M/s BHEL		4.600	
17	Replacement of damaged floor and Construction of Roads in PTPS Colony, Panipat as per new norms of Government of Haryana		0.952	
16	Revival of Fire Fighting System of Unit6, PTPS, Panipat		0.600	
15	Purchase of Ion Chromatography system fully automatic PC based, RGTPP Hisar	0.65		
14	Construction of First Aid Centre and additional RCC Roof slab of DG Set house at RGTPP, Khedar, Hisar	0.55		
13	Work for Supply, Erection, Testing and Commissioning of 02 Nos. ABB make unitrol-6080 Digital Automatic Voltage Regulator (DAVR) for Generator Excitation System and replacement with existing ABB make Unitrol-F DAVR at RGTPP, Khedar, Hisar		2.00	
12	Procurement of Complete Battery Banks Lead Acid Plante 220V, 2140AH in each Unit (Unit 1&2), RGTPP, Khedar, Hisar	3.35		

# B. Additional Scheme Proposed for balance period of MYT 2019:

Table	3-4:Additional	Scheme	under	CIP
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Sr No	Capital Expenditure Work	(Rs. Cr.)		)
		2022-23	2023-24	2024-25
1	Supply, ETC and 5 years comprehensive ARC of IP based CCTV network camera system at perimeter of PTPS **		5.65	
2	Replacement of 03 Nos fire tenders at DCRTPP , as the useful life is going to be exhausted		1.91	

\*\*The above scheme has been proposed by DG/CISF during security audit of PTPS for covering the perimeter of PTPS boundary under surveillance for effective monitoring in view of the prevailing situations. Thus, the same is required to be taken up by HPGCL as per the advice of CISF. The security audit report is placed at **Annexure-P1**.

# C. Installation of EV Charging Stations at HPGCL Plants & Head offices

33. HERC in its MYT Regulation 2019 has encourages to adopt the Electric Vehicles in the State by making endeavour to setup public chargers near their substations or any other appropriate place as under:

"9.15 To enable faster adoption of Electric vehicles in the State, the Utilities i.e., HPGCL, HVPNL, DHBVN and UHBVNL shall endeavour to set up Public Charging Station (PCS) for charging Electric Vehicles near to their Sub-Stations or any other appropriate place."

- 34. In view of the Hon'ble Commission far sighted approach for having state should be ahead in adopting the Electric Vehicles, HPGCL would also like to contribute a bit by having EV charging stations at all Plants and Head quarter.
- 35. Accordingly, it is proposed to have the EV charging Station (06Nos) at all respective locations (i.e., Plants and Head Quarter), the tentative cost of the same is approximately Rs 80lakh for each site having six charging stations, thus approx. expenditure of Rs 3.2Crore.
- 36. The Hon'ble Commission may allow in principle approval to HPGCL for proceeding for having EV charging stations at HPGCL Plants including head quarter. However, the actual expenditure may be allowed after completion of the scheme.

# **CHAPTER 4**

# A4 NEW ENVIRONMENTAL NORMS AND OTHER ISSUES

### A. New Environmental norms Background:

- 37. The Ministry of Environment, Forest and Climate Change (MoEF & CC), Government of India, notified the Environment (Protection) Amendment Rules, 2015 (Amendment Rules, 2015) on 07.12.2015 & dated 19.10.2020 amending/introducing the standards for emission of environmental pollutants to be followed by Thermal Power Plants.
- 38. The following are the amendments made to the existing allowable level of emission;

Pollutants (mg/Nm3)	COD before 2003		COD af	ter 2003
	< 500 MW	> 500 MW	< 500 MW	> 500 MW
Particulate Matter (PM)	100 50		0	
Sox	600	200	600	200
NOx	600 450		50	
Hg	0.03			
Sp. Water Cons.(M <sup>3</sup> /MWh)	3.5			

Table 4-1:Standard for Emission as per New Environment Law

39. The following actions are required to be taken for compliance of new norms: -

- SOx: Flue Gas Desulphurisation (FGD) is required to be installed to control SOx levels.
- ii. NOx: Following are the technologies for control of NOx levels: -
  - (a) Combustion modifications i.e. installation of low NOx burners and Separated Over Fire Air (SOFA) Damper.
  - (b)Installation of Selective Catalytic Reduction (SCR) / Selective Non- Catalytic Reduction (SNCR).
- iii. **SPM**: ESP rectification/up-gradation needs to be carried out to control SPM levels.
- 40. Hon'ble Commission has already granted in-principle approval in HERC/PRO-59 of 2018 vide order dated 07.03.2019 for implementation of New Environmental Norms. HPGCL shall approach the Hon'ble Commission through separate petition after the completion of the work for seeking pass through of the same.

# B. <u>Status of FGD (for SOx) at PTPS, RGTPP & DCRTPP Station:</u>

- 41. NIT's were floated for installation of Wet Limestone based FGD at RGTPP, Hisar and DCRTPP, Yamunanagar. State Level HPPC in its meeting held on 10.02.2020 under the Chairmanship of Hon'ble Chief Minister, Haryana deferred both the cases. Subsequently, Govt. of Haryana decided retendering and participation of only those companies which are registered in India.
- 42. Accordingly, NIT for installation of Wet Limestone based FGD at RGTPP, Hisar & DCRTPP, Yamunanagar and for installation of Dry Sorbent Injection (DSI) system in Unit-6 and Unit-7&8, PTPS, Panipat were issued on 29.09.2020. However, State Level HPPC in the meeting held on 12.06.2021 decided that the new Gol notification dated 31.03.2021 requires to be thoroughly examined. Accordingly, both the agenda were deferred.
- 43. CPCB, MoEF & CC vide letter dated 27.08.2021 intimated that PTPS Thermal Power Plant has been categorized in Category 'A' and RGTPP, Hisar & DCRTPP, Yamunanagar Thermal Power Plants has been categorized in Category "C".
- 44. Further, the case was again put up for administrative approval of GoH for retendering regarding installation of Flue Gas Desulphurization System (FGD) Package at HPGCL plants. On 14.04.2022, Hon'ble CM Haryana has directed that "CM would like the matter to be submitted after 9 months." Accordingly, the case would be submitted to GoH for further directions in December-2022.
- 45. It is further submitted that MOEF&CC, GoI vide notification dated 05.09.2022 has revised timelines for compliance of New Environmental Norms in respect of SOx and NOx emission as under :-

S . No.	Category	Location	Timelines for retiring units)	compliance (Non-
			Parameters other than SO2 emission	SO2 emission
(1)	(2)	(3)	(4)	(5)
1	Category A ( <u>U</u> nit-6,7&8, PTPS, Panipat)	Within 10 km radius of NCR or cities having million plus population	Upto 31st December, 2022	Upto 31st December, 2024
2	Category B	With 10 km radius of Critically Polluted Areas or Non-attainment cities	Upto 31st December, 2023	Upto 31st December, 2025
3	Category C (Unit-1&2, RGTPP, Hisar & Unit-1&2, DCRTPP, Yamunanagar)	Other than those included in Category A and B.	Upto 31st December, 2024	Upto 31st December, 2026

Table 4-2:Revised Timeline for Compliance

# C. <u>Status for installation of low NOx Burners at HPGCL Plants</u>

- 46. MoEF & CC vide notification dated 05.09.2022 has revised the timeline for compliance of new environment norms in respect of NOx for Category "A" (PTPS Units) upto 31.12.2022 and for Category "C" (RGTPP & DCRTPP Units) upto 31.12.2024.
- 47. However, E-NIT for installation of low NOx burners at DCRTPP, Yamunanagar and RGTPP, Hisar and PTPS (Unit-7&8) was issued on 26.08.2021.
- 48. Part-II (Price Bid) of the tender was opened on 20.10.2022. M/s ISGEC Heavy Engineering Ltd., Noida emerged as L-1 bidder. WTD's HPGCL has further recommended the case to State Level HPPC for consideration and award of work. The case would be submitted to High Power Purchase Committee shortly.

# **CHAPTER 5**

#### A5 **MISCELLANEOUS ISSUES**

#### A. Revision of Water Charges by HWRA & its Financial impact on HPGCL.

49. The Haryana Water Resources (Conservation, Regulations and Management) Authority, Panchkula (herein referred as "HWRA") in exercise of power conferred under Sub-Section (1) of Section 18 of the Haryana water Resources (Conservation, Regulations & Management) Authority Act, 2020, as amended up to date, the HWRA vide Agenda No 1 of 17th meeting held on 15.07.2022, approved the revised tariff for bulk water uses of surface water. The revised tariff has been notified by HWRA vide Notification No. 199/N/LA/HWRA/2022 and same may be perused at Annexure - P2.

#### 50. The Hon'ble Commission reference is further invited to Section 3.20 of MYT Regulation, 2019 as under:

"3.20 "Change in Law" shall mean occurrence of the following events: -

(a) enactment, bringing into effect or promulgation of any new Indian law; or (b) adoption, amendment, modification, repeal or re-enactment of any existing Indian law; or

(c) change in interpretation or application of any Indian law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation or application; or

(d) change by any competent statutory authority in any condition or covenant of any consent or clearances or approval or licence available or obtained for the project; or (e) coming into force or change in any bilateral or multilateral agreement or treaty between the Government of India and any other Sovereign Government having implication for the generating station or the transmission system regulated under these regulations.

"Provided that financial implication of change in law in relation to a PPA or TSA shall be as may provide in the PPA or TSA"."

- As per the above Regulation 3.20 of MYT Regulation 2019 as amended thereof, change 51. by any competent statutory authority in any condition or covenant of any consent or clearances or approval or license available or obtained for the project falls under the definition of "Change in Law" and HPGCL is required to be placed in the same economic position, as the Change in law event has not been occurred.
- 52. Further, as per the notification, the change in water charges are as under:

#### From FY 2012 to FY 2018

	Table 5-1:Water Charges from 2012 to 2018						
	Tariff as per Govt notification 3	0.07.2012	Tariff as per Govt notifica	ation 30.11.2018			
S.No	Description	Tariff	Description	Tariff			
1	Brick making and pisewall	Rs 600 per 2500		Rs 1500per 100			
	Building and water for	Cft.(Rs 8.5/KI)		Cum (Rs. 15/KL)			
	Construction work						
·							

2	<u>.</u>	Water supply in Bulk; Industries Power plants and other bulk users	Rs 300 per 2500Cft (Rs 4.25/KL)	Water supply in Bulk:- (a) Beverage and Bottled water industry	Rs 2000 per 100 Cum (Rs 20/KL)
				(b) Other industries, Power Plants and Bulk users	Rs 1000 per 100cum (Rs 10/KL)
				(c) Railways & Army	Rs 750 per 100Cum (rs 7.5/KL)
3	•	Drinking purpose	Rs 12 per 2500 Cft. (Rs0.17/KL)	Drinking purpose (including Railway and Army)	Rs         25         per         100           cum         (Rs           0.25/KL)
4		Other States	Rs 40 per 2500Cft. (Rs 0.57/KL)		Rs 100 per 100Cum (Rs 1/KL)
5		Fish ponds Except Fist processing, freezing and Hatchery units			Rs 100 per cum (Rs 1/KL)

#### From FY 2022 onwards

Table 5-2: Water charges from 2022 onwards					
	Tariff as per Govt notification 30.11.2018		Tariff determined and decided by HWRA in 2022	Percentage increase in tariff since 2018	
S.No	Description	Tariff			
1	Brick making and pisewall Building and water for Construction work	Rs 1500 per 100 Cum (Rs. 15/KL)	Rs 3000 per 100 Cum	100%	
2	Water supply in Bulk:- (a) Beverage and Bottled water industry	Rs 2000 per 100 Cum (Rs 20/KL)	Rs 4000 per 100 cum	100%	
	(b) Other industries, Power Plants and Bulk users	Rs 1000 per 100cum (Rs 10/KL)	2000 per 100cum	100%	
	(c) Railways & Army	Rs 750 per 100Cum (Rs 7.5/KL)	1500 per 100Cum	100%	
3	Drinking purpose (including Railway and Army)	Rs 25 per 100 cum (Rs 0.25/KL)	Rs 100 per 100Cum	400%	
4	Other States	Rs 100 per 100Cum (Rs 1/KL)	No Change	0%	
5	Fish Ponds except fish processing, freezing and Hatchery units	Rs 100 per cum (Rs 1/KL)	No Change	0%	

#### Table 5-2:Water charges from 2022 onwards

- 53. Point 2 (b) of the above Table 5.2 needs to be perused, wherein 100% change in water tariff is applicable for plants of the State and HPGCL being the state entity is also liable to pay the increase in tariff after the said notification comes in force.
- 54. It is worth to apprise that MYT Regulation 2019 as amended thereof, are based on the data of FY 2017-18 for allowing the future tariff heads under the regulations in its order dated24.10.2019. Thus, there is approximately 100% variation in the water charges w.e.f from 01.08.2022.
- 55. The said notification is having the financial implication on HPGCL. Thus, HPGCL is required to be placed in the same economic condition as the same event has not been occurred.
- 56. It is pertinent to mention that CERC in its order dated 19.02.2016 in153/MP/2015 has also identify that increase in water charges falls under "*Change in Law*" even for Section 63 bided projects. However, HPGCL covers under Section 62, EA,2003, and require to allow the actual cost paid in the matter to make HPGCL and placed HPGCL to the same economic position as the Change in Law event has not incurred.
- 57. Therefore, Hon'ble Commission may take the note of the same and declare the increase in water charges as per notification dated 15.07.2022 of HWRA under "*Change in law*" event and any increase in R&M charges on account of the said notification need to be allowed for the balance duration of MYT Regulation 2019, on monthly basis through supplementary bills as part of fixed cost as per actuals.

# B. <u>Claim of fixed charges as per Regulation of MYT 2019 in respect of</u> <u>PTPS Units.</u>

58. The Hon'ble Commission vide its order dated 22.02.2022 in HERC/Petition No 44 of 2021 while adjudicating the ARR tariff for FY 2022-23 for PTPS has considered as under:

"Page 58 of the order:

As PLF of PTPS Unit-6,7& 8 are approved at 55% each, R&M and A&G expenses for the PTPS Units 6,7 &8 has been reduced to 50%. Reduced generation of these units vis- a- vis norms will entail reduced expenditure on R&M and A&G. Thus, the Commission is of the considered view that the consumers out not to be burden with additional O&M expenses of the power plants that are intermittently scheduled."

- 59. The present year carries the challenges for the State in terms of various IPPs are not fulfilling their contractual obligations in term of PPAs, creates the demand and supply mismatch, which results in scheduling of HPGCL Units at maximum beyond normative norms specified by the Commission vide its orders.
- 60. The plant availability of PTPS Units for first half of the year is as under:

PTF	PTPS PANIPAT					
PERIOD	Unit-VI	Unit-VII	Unit-VIII			
Apr-22	99.67	99.19	96.32			
May-22	54.74	100.00	100.00			
Jun-22	91.52	95.05	100.00			
Jul-22	99.48	99.46	100.00			
Aug-22	87.34	100.00	99.03			
Sep-22	99.75	99.13	94.43			
FY 2022-23 (Up to Sep 22)	88.61	98.82	98.32			
HERC Norms	55%					

61. Accordingly, the Plant Load Factor for the corresponding to the availability is as under:

Table 5-4: Plant Load Factor (%) for First Half of FY 2022-23

PTPS PANIPAT					
	Unit-VI	Unit-VII	Unit-VIII		
Apr-22	86.48	94.20	90.68		
May-22	47.04	93.00	93.53		
Jun-22	77.67	88.80	94.25		
Jul-22	83.18	88.17	88.27		
Aug-22	70.96	91.86	88.98		
Sep-22	77.39	88.27	82.43		
FY 2022-23 Up to Sep 22	73.67	90.72	89.70		
HERC Normative Norms	55%				

- 62. The Hon'ble Commission may take the note from the Table 5.4 above, that the loading of the HPGCL PTPS units, this clearly reflects that the Units are being used with higher loading than the norms specified by the Hon'ble Commission.
- 63. The beneficiaries have also communicated vide letter dated 25.08.2022 (Annexure- P3) that in view of the prevailing circumstances, the Units of HPGCL are likely to be scheduled at maximum on account of failure of contractual obligations of various IPPs.
- 64. Thus, after the affirmation given by beneficiaries, HPGCL is bound to upkeep the plant available as per the instant MYT regulations, which leads to increase in R&M activity of the plant/ Units.
- 65. In view of the above circumstances, as, the Unit utilization is expected to be on higher side. The Hon'ble Commission may take the view of the above, and consider to allow expenditure in terms of IWC, R&M, A&G as per norms of MYT Regulations ,2019 as amended thereof for FY 2023-24 and any additional expenditure for FY 2022-23 may be allowed as per actual while carrying True-up for FY 2022-23 and normative tariff as per the norms of MYT Regulations for FY 2023-24.

# C. Intimation of benefits yield by running of Unit-6, PTPS

66. The Hon'ble Commission in its order dated 18.02.2021 had issued the directive for "De-Commissioning / Closure of PTPS Unit-6" as under:

> "From the data placed on record, the Commission observes that this Unit of 210 MW is capable of generating about 1564 MUs at a PLF of 85%. However, the average generation from the FY 2017-18 to the FY 2020-21 (up to September, 2020) was only about 232.56 MUs at an average PLF of 12.64%. In fact, in the FY 2019-20 the Units was not at all scheduled, hence, the actual generation was nil. The plant and machinery of PTPS Unit – 6 is of the same vintage as that of PTPS Unit – 5, despite the fact that Unit – 5 was commissioned in March, 1989 and Unit - 6, due to various reasons, was commissioned only in March, 2001. Further, Unit -6 is almost fully depreciated and loans almost paid off. Resultantly, the major fixed cost as computed by the Commission are Employees cost, RoE and Repair & Maintenance which imposes avoidable burden on the electricity consumers of Haryana despite the fact the plant remains un-scheduled. Thus, at this stage PTPS Unit – 6 is similarly placed as that of PTPS Unit – 5, which has been decommissioned / closed. Additionally, going forward, given the larger integration of RE Power as well as Hydro Power and the fact that strict environmental norms would further add to the cost of generation, PTPS – Unit 6 is not expected to be called in for generation. Hence, in line with the views expressed in the SAC Meeting, it would be appropriate to de-commission / close PTPS Unit – 6 as well at the earliest. HPGCL is accordingly directed to take up the issue with the State Government within one month from the date of this Order under intimation to the Commission."

- 67. HPGCL has secured the stay against the impugned order dated 18.02.2021 vide APTEL order dated 24.09.2021 (Annexure- P4), wherein Hon'ble Tribunal allows to recover the interim tariff subject to outcome of the appeal. Accordingly, interim tariff on account of the same has been recovered for the duration of 2021-22 on the basis of FY 2020-21 tariff.
- 68. Further, the DISCOMs has denied the payment of RoE for Unit-6,PTPS on the basis of the Commission order for FY 2020-21, wherein RoE has been denied. The same is also subjudice at APTEL and HPGCL reserve it's right to agitate the same at the time of hearing. The same shall be trued-up after the matter adjudicated by hon'ble Tribunal in the matter.
- 69. It is worth to apprise that scheduling of plants are the sole prerogative of the DISCOMs, and HPGCL is bound to declare the plant availability as per norms.
- 70. However, it is worth to apprise that due to past contractual obligations of the DISCOMs Unit-6, PTPS was not getting proper scheduled in the past and the other concluded contracts which are costlier than Unit-6, PTPS had been scheduled on the basis of marginal cost base savings.
- 71. The matter of the directives was deliberated at highest level under the Chairmanship of Hon'ble CM Haryana, wherein it was decided to run the Unit-6, PTPS and compare the cost of the same with the marginal cost at State Periphery considering all costs.

72. Accordingly, the savings yield by DISCOMs by running Unit-6,PTPS against the landed cost of IEX considering wheeling charges and losses till State Periphery has been demonstrated as under:

S.No	Month	Savings in Rs Cr
1	Feb,2022	7.77
1	March,2022	59.66
3	April,2022	85.30
4	May,2022	33.97
5	June,2022	36.32
6	July,2022	25.88
7	August,2022	14.02
8	September,2022	26.37
Total		289.29

Table 5-5:Savings yield by DISCOMs by running Unit-6,PTPS against IEX at State

73. The Hon'ble Commission may take the note of the above savings yield for DISCOMs for retaining Unit-6, PTPS. It is worth to apprise that the savings yield in the matter is more than the total R&M, A&G, IWC & RoE allowed as per norms for the balance duration of Unit-6, PTPS.

#### **CHAPTER 6**

#### A6 <u>TRUE-UP FOR FY 2021-22</u>

#### Introduction:

- 74. Generation tariff for FY 2021-22 was determined by the Hon'ble Commission as per HERC MYT Regulation, 2019 or as amended thereof on the tariff Petition of HPGCL, vide its Order dated 18/02/2021.
- 75. As per the Regulation 13.1 of the HERC, MYT Regulation, 2019, truing up of ARR of the previous year shall be carried out with midyear performance review of each year of the control period only when the audited accounts in respect of the year under consideration is submitted along-with the application. In case audited accounts pertaining to the year, of which truing up is to be undertaken, are not available, the generating company or the licensee as the case may be shall submit the provisional account duly approved by the BoD's of the company/licensee.
- 76. Accordingly, HPGCL is submitting the true-up for FY 2021-22 based upon the audited accounts (**Annexure-P5**) for the FY 2021-22 for the approval of the Hon'ble Commission.
- 77. The following components have been considered by HPGCL for true up claim for FY 2021-22:
  - i) Operation & Maintenance (O&M) Expenses
  - ii) Depreciation
  - iii) Interest & Finance charges
  - iv) Interest on working capital
  - v) Return on Equity (RoE)
  - vi) Cost of Oil
- 79. Component wise variation in the approved fixed cost as adjudicated by HERC in terms of MYT Regulation, recovered cost as per instant MYT Regulation and actual fixed cost exclusive of solar business as per the audited accounts is submitted for consideration and approval of Hon'ble Commission for true-up of FY 2021-22.
- 78. The reference is invited to HERC MYT Regulation 2019 as under:

"30. RECOVERY OF ANNUAL FIXED CHARGES (CAPACITY) CHARGES FOR THERMAL POWER PROJECTS

(a) The fixed cost of a thermal generating station shall be computed on annual basis, based on norms specified under these Regulations. Payment of capacity charge by the beneficiaries shall be on monthly basis in proportion to allocated / contracted capacity. The total capacity charges payable for a generating plant shall be shared by its beneficiaries as per their respective percentage share / allocation in the capacity of the generating plant;

#### 79. Further the reference is invited to the Regulation 13 of MYT regulation 2019 as under:

#### "13. TRUING-UP

- 13.1 Truing-up of the ARR of the previous year shall be carried out along with mid-year performance review of each year of the control period only when the audited accounts in respect of the year(s) under consideration is submitted along with the application. In case audited accounts pertaining to the year, of which truing-up is to be undertaken, are not available, the generating company or the licensee as the case may be, shall submit the provisional account duly approved by the Board of Directors of the company/licensee.
- 13.2 Truing-up of uncontrollable items shall be carried out at the end of each year of the control period through tariff resetting for the ensuing year and for controllable items shall be done only on account of force majeure conditions and for variations attributable to uncontrollable factors.
- 13.3 The Commission shall allow carrying costs for the trued—up amount (positive or negative) at the interest rates specified in these Regulations by adjusting the interest allowed on the working capital requirement for the relevant year of the control period. Upon completion of the mid-year performance review and truing up in accordance with these regulations, the Commission shall pass an order recording:

(a) The revised ARR for such financial year including approved modifications, if any;
 (b) Holding cost for under/over recovered amount from the close of the relevant year and upto the middle of the ensuing year of the control period whereupon the trued-up amount has been adjusted by appropriate resetting of tariff in accordance with regulation 13.4, calculated as additional borrowing for working capital for that period.

Provided that no carrying cost shall be allowed on account of delay in filing for true-up due to unavailability of the audited accounts

- 13.4 Over or under recoveries of trued-up amount in previous year(s) of the control period shall be allowed to be adjusted in the ensuing year of the control period by appropriate resetting of tariff. The unrecovered amount in the one control period shall be adjusted in the subsequent control period."
- 80. The above regulations clearly specify the methodology for recovery of the fixed charges components as per the availability of the plants and the True-up is also required to be carried between "Recovered" as per plant availability in terms of Regulation 30 of MYT Regulation 2019 and "Actuals" as per audited accounts. Thus, in view of the above, HPGCL has "Recovered" the components of the tariff as per the availability of the Units and accordingly, the "Recovered" shall become the "Approved" charges as per the Regulation 30 of MYT Regulation 2019... Therefore, the True-up has been offered on "Recovered" vs "Actual" as per audited accounts in the matter.
- 81. Further, Hon'ble Commission vide its order dated 18.02.2021 at page no 88 of the order has disallowed the cost of Unit-6, PTPS as under:

".....Consequently, the Commission has considered it appropriate not to consider the proposed determination of generation tariff (fixed and ECR) for PTPS Unit-6)."

82. HPGCL has opted for an appeal against the above order dated 18.02.2021 vide Appeal No 150/2021 at APTEL. APTEL vide its interim order dated 24.9.2021 has adjudicated that Unit-6 has been allowed to recover the interim tariff. The same may be perused at Annexure-P4.

83. As, the final adjudication of the matter in respect of tariff of Unit-6, PTPS is still pending at Hon'ble APTEL. HPGCL has recovered the interim tariff on the basis of FY 20-21 which needs to be adjusted after the outcome of the instant appeal. Thus, HPGCL is not offering any True-Up in respect of Unit-6, PTPS in the present petition. However, HPGCL is hereby by intimating the expenditure of Unit-6, PTPS only and reserve its right for seeking trueup after the matter attain finality at APTEL.

# A. TRUE-UP OF HPGCL UNITS EXCLUDING UNIT-6, PTPS.

#### **Operation and Maintenance Expenses**

84. The operation and maintenance expense include actual expenses incurred by HPGCL towards Employees cost, Repair & Maintenance expenses and A&G expenses.

#### **Employee Cost**

- 85. Employee expenses mainly comprise of salaries, dearness allowance, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses etc. Repair & Maintenance expenses are the expenses incurred towards day-to-day upkeep of generation assets for better and reliable operation. Administration & General expenses mainly comprise of property and material related expenses, communication expenses, professional charges, conveyance and travelling allowances, etc.
- 86. Hon'ble Commission had approved O&M Expenses of Rs. 698.66Cr for FY 2021-22. The total actual O&M Expenses as per audited accounts for FY 2021-22 remains Rs. 856.23Cr. The expenses relating to the net Actual O&M expenses (exclusive of solar business of Rs 0.68Cr) remain Rs. 855.55 Cr.

Particular	FY 2021-22 (Approved) 1	FY 2021-22 (Recovered) 2	FY 2021-22 (Actual) 3	Variance 4=(3-2)	True Up claimed (5)
Employee Cost	534.94	410.12	610.48	200.36	200.36
Repair & Maintenance	144.05	111.34	219.72*	108.38	57.85**
Administrative & General	19.68	14.48	25.35	10.87	2.97***
Total	698.66	535.94	855.55	319.61	261.18

#### Table 6-1:Operation and Maintenance Expenses excluding Unit-6,PTPS (Rs. Cr.)

\*Higher R&M is on account of RGTPP2 Rotor and maintenance of DCRTPP1

\*\* Rs 57.85Cr of expense (CHP- Rs50.45Cr & AAC Rs 7.40Cr) in respect of all plants which needs to be pass through. \*\*\* Rs 2.97 Cr of Claim of A&G in line with Note 1 at page 97 of the Commission order dated 18.02.2021.

87. The primary reason for the significant gap between the Approved, Recovered and Actual O&M expenses is due to increase in uncontrollable expenses on account of the employee cost including terminal liabilities & non availability of RGTPP-2 since 19<sup>th</sup> September,2020 & DCRTPP1 less availability.

- Approved Employees Cost for FY 2021-22 was Rs. 534.94Crore as allowed by Hon'ble Commission, whereas, the actual employee cost for FY 2021-22 as per audited accounts remains Rs 610.48Crore inclusive of net Defined Benefit liability (terminal liability) of Rs 402.07 Crore in respect of employees as per the Actuary Valuation Report (Annexure P6) submitted by the independent actuary by Sh A. Balasubrmanian, Senior Consultant & Actuary.
- 89. For the period in consideration i.e. FY 2021-22, HPGCL appointed Sh A. Balasubrmanian, Senior Consultant & Actuary, as independent valuer for the valuation for FY-2021-22. It is further submitted that valuation of the actuary is based on the given data and circumstances/ scenario and other market conditions for investment. HPGCL is having two employee welfare trusts namely HPGCL Employees Pension Fund Trust and HPGCL Employees Provident Fund Trust. Retirement benefit like Pension/ Gratuity Leave encashment and Commutation is being paid by HPGCL through its HPGCL Employees Pension Fund Trust. Trust makes the investment of the funds contributed by HPGCL based on the valuation of Actuary report according to Ministry of Finance, GOI, Department of Finance O/o no F.no.11/14/2013 dated 02.03.2015. Actuary valuation is based on various data like employees count/ average age of active employees/ number of pensioners/ average age of pensioners /monthly salary eligible for LTC (active employees & pensioners). Besides this information Actuary also considers Discount rate/salary escalation rate/ Attrition rate/ Withdrawal rate/ Mortality rate etc. Based on all the above information, an Actuary gives its report to Trust for safeguard the interest of the employees of HPGCL after retirement. The past year Trend of Terminal Liability of HPGCL evaluated by the independent Actuary from FY 2013-14 is as under:

S. No.	Financial Year	Amount in Rs Cr.
1	2013-14	152.36
2	2014-15	250.76
3	2015-16	132.51
4	2016-17	478.07
5	2017-18	485.01
6	2018-19	688.45
7	2019-20	356.68
8	2020-21	402.08
9	2021-22	402.07

90. Further, HPGCL is bound by the rules and regulations of State Government pertaining to employee's benefits (pay structure, D.A., annual increment@3%). Any revision, therefore in the pay structure of its employees is beyond the control of the HPGCL and falls under Regulation 8.3.8(b). All these factors lead to the increase in the employees cost of HPGCL.

- 91. Terminal liability is an uncontrollable expenditure under Regulation 8.3.8(b) of MYT Regulation 2019 and the same is being allowed by the Hon'ble Commission with the True-up of respective year.
- 92. Therefore, in view of the above, the Hon'ble Commission is requested to kindly take note of the above and allow the net true up of Rs. 200.36 Cr. in respect of Employee Cost as per actual basis in line with Regulation 8.3.8 (b) of MYT Regulation 2019.

## R&M and A&G Expenses:

- 93. The O&M expenses other than employee cost, i.e. R&M and A&G expenses approved by the Hon'ble Commission for FY 2021-22 are Rs 144.05 Crore & Rs 19.68 Crore. However, the amount recovered by HPGCL is Rs. 111.34Cr and 14.48Cr respectively due to reduced availability of HPGCL Units on account of non-availability of RGTPP Unit-2 from September 19<sup>th</sup>, 2020 onwards. The actual R&M and A&G expense for the year remains Rs. 219.72Cr (excluding solar business) and Rs 25.35Cr.
- 94. The increase in R&M amount is primarily attributable to the cost of R&M being carried for RGTPP-2 and also increase in R&M cost of DCRTPP 1 on account of reduced availability of the said Units. The other aspects which remain unrecovered is expense of Coal Handling Plant and Additional Auxiliary Consumption.
- 95. The reference is invited to Note 36 of the Financial Statement along with S.No 25 of Note 43, wherein the Other Operating Expense has been captured. It is worth to mention that Rs 50.45Cr relates to Coal Handling Plant and Rs 7.41Cr on account of Additional Auxiliary Consumption. It is further clarified that no claim in respect of Additional Auxiliary Consumption of RGTPP2 and DCRTPP 1 on account of unavailability has been made by HPGCL in True-Up.
- 96. Further, the Additional Auxiliary Consumption (AAC) is the power received from the grid for running the essential auxiliaries to declare availability of the Unit is one of the legitimate O&M expense of any thermal station and needs to be allowed under O&M. In case, the margins under tariff head are not available, the same is allowed to be pass through additionally, as the Units remains boxed up/RSD on account of beneficiaries' directives and the petitioner don't have any other source of income to absorb the same. Thus, the legitimate expense of Rs 7.40Cr may be allowed in the matter under the head of R&M.

- 97. The CHP expense is genuine in nature which has been carried by the Petitioner for making the plant available, which becomes the part of O&M cost, the same needs to be allowed under True-up, as per the Regulation 31 &32 read with Regulation 33, it has been clearly demonstrated that landed cost of fuel is taken of railways unloading point, whereas the CVPF has been considered under MYT Regulation 2019 before 2<sup>nd</sup> Amendment. Thus, in the past it was inadvertently left to be booked under O&M charges, thus the same stands unrecovered, being legitimate O&M expense. Thus, the expenditure of Rs 50.45Cr needs to be allowed in the matter and the petitioner should not be burden by disallowing the same, as there is no source of income to adjust the same.
- 98. The reference is further invited to Regulation 13.4 of the MYT Regulations 2019 has specified as under:

"13.4 Over or under recoveries of trued-up amount in previous year(s) of the control period shall be allowed to be adjusted in the ensuing year of the control period by appropriate resetting of tariff. The unrecovered amount in the one control period shall be adjusted in subsequent control period."

99. The Hon'ble Commission in its order dated 18.02.2021 at page 97 at Note :1 has adjudicated as under:

"Note -1 : As PLF of PTPS Unit-7&8 are approved at 53% & 53%, respectively as against the norms of 85%, R&M and A&G expenses for the PTPS 7&8 has been reduced to 50%"

- 100. Thus, in view of the above order, HPGCL has right to claim any variance on account of increase in A&G/R&M expenses up to normative as per Regulations. It is worth to apprise that the actual A&G of PTPS 7&8 stands at Rs 7.51Cr against the norms as per instant MYT Regulation which allows Rs 8.33Cr as per Norms. Thus, still HPGCL expense of Unit 7&8 in respect of A&G remains on lower side and liable to be allowed. In view of the above , HPGCL raise the claim of Rs 2.97Cr.
- 101. In view of above, Hon'ble Commission is requested to allow the true up of the O&M cost amounting to Rs.261.18 Crore, however, the unrecovered amount of Rs 58.43 Crore shall be allowed to recovered as per Regulation 13.4 of MYT regulations 2019 at the end of control period of present control period of MYT Regulations,2019.
- 102. The Hon'ble Commission is requested to take the note of above & allow the same as proposed above, accordingly.

#### **Depreciation**

103. The actual depreciation of HPGCL for FY 2021-22 as per the audited accounts is Rs. 334.9Cr. This includes depreciation for solar assets to the tune of Rs. 3.15 Cr. Therefore, the actual depreciation exclusive of the solar business worked out as Rs 331.75Cr.

- 104. Further Hon'ble Commission in its Order dated 31.10.2018 & 07.03.2019 has directed HPGCL not to claim depreciation on spares and dismantling cost on account of Ind AS. Depreciation on Capitalization of spares and decommissioning cost for FY 2021-22 in accordance Ind AS, is Rs. 5.68 Cr & Rs. 10.11Cr. Thus, HPGCL in compliance with aforesaid directives has excluded a sum up to Rs 15.79Cr. (5.68+10.11) from its true up claim of Depreciation.
- 105. Accordingly, the net allowable Depreciation for FY 2021-22 exclusive of Solar business and depreciation on spares and decommissioning cost worked out as Rs. 315.95Cr (331.75-5.68-10.11). The approved depreciation for FY 2021-22 was Rs. 322.87 Cr.
- 106. The depreciation detail for the FY 2021-22 is as under:

S.	Unit	Approved	Actual as	Dep.	Dep. on	Net	Recovered	Variance	True-Up
No			per	on	account	allowable	Dep.	as per	claimed
			audited	GAAP	of Ind	dep.		Actuals	
			accounts*	Spares	AS				
А	В	С	D	Е	F	G=(D-E-	Н	l=(G-H)	J
						F)			
1	PTPS-7-	53.45	57.14	0.47	5.01	51.66	53.45	(1.79)	(1.79)
	8								
2	DCRTPP	56.33	57.73	1.22	1.42	55.09	50.54	4.55	-
3	RGTPP	206.27	211.15	3.99	3.68	203.48	103.64	99.84	-
4	Hydel	6.82	5.72	-	-	5.72	5.71	0.01	0.01
	Total	322.87	331.75	5.68	10.11	315.95	213.34	102.61	(1.78)

\*Excluding Solar business of Rs. 3.15Cr.

- 107. HPGCL falls short of Rs 102.61 Crore against the actual depreciation of the HPGCL Units. It is worth to intimate that the shortfall in recovery of tariff in respect of RGTPP-2 & DCRTPP-1 is the main reason for HPGCL to have short fall in recovery of allowed depreciation.
- 108. The reference is further invited to Regulation 13.4 of the MYT Regulations 2019 has specified as under:

" 13.4 Over or under recoveries of trued-up amount in previous year(s) of the control period shall be allowed to be adjusted in the ensuing year of the control period by appropriate resetting of tariff. The unrecovered amount in the one control period shall be adjusted in subsequent control period."

- 109. In view of above, Hon'ble Commission is requested to allow the true up of the Depreciation amounting to (Rs.1.78Crore), however, the unrecovered amount of depreciation i.e. Rs 104.39 Crore shall be allowed to be recovered as per Regulation 13.4 of MYT regulations 2019 at the end of control period of present MYT Regulations, 2019.
- 110. Accordingly, the Hon'ble Commission is requested to take the note of above and allow recovering the depreciation under True up as proposed above.
- 111. A copy of the Fixed Assets Register for the FY 2021-22 has already been submitted to the Hon'ble Commission vide HPGCL memo 222 /HPGCL/REG-522/2022 dated
   15.11.2022 (Annexure- P9) for kind consideration of the Hon'ble Commission.

### Interest & Finance Charges

- Hon'ble Commission in its order dated 18.02.2021 had approved the interest and finance charges for FY 2021-22 as Rs. 104.77Cr (*excluding Unit-6,PTPS*) as per the past practice. HPGCL is proposing to claim the 50% of the savings (Rs. 59.23Cr) on account of restructuring as per Regulation 21.1 (v) of HERC MYT Regulation, 2019 and allowed by the Commission in the past.
- 113. Actual Interest and Finance Charges for FY 2021-22 as per audited account is Rs. 31.09Cr. An amount of Rs. 1.71Cr. of the Interest and Finance Charges pertains to the Solar Business, as such net actual Interest and Finance Charges exclusive of solar business as per the audited accounts remains Rs. 29.38Cr.
- 114. The saving in the Interest and Finance Charges is due to restructuring of its loan portfolio & advance Payments made by HPGCL by applying prudent financial management. Refinancing cost of such restructuring has already been allowed and adjusted by the Hon'ble Commission in its previous Tariff Orders and also identified the same in order dated 18.02.2021.
- 115. As per the regulation 21.1 (v) of HERC MYT Regulation, 2019 the cost associated with the refinancing has to be borne by the beneficiaries and the net savings after deducting the cost of refinancing shall be subject to incentive and penalty framework as per Regulation 12.
- 116. HPGCL has taken loans from various financial institutions for setting up of its power plants & related capex requirements. The loans originally taken from Power Finance Corporation, Rs. 965.48 Crore for RGTPP Hisar and Rs. 874.58 Crore for DCRTPP, Yamuna Nagar, were swapped through SBI in Feb 2016 & in April 2017 respectively. Interest and Finance charges for FY 2021-22 as per pre & post -restructuring Loan portfolio exclusive solar business are given below:

Particulars	Rate of Interest	Opening Bal	Drawls during the year	Repayments during the year	Closing Balance	Interest during the year			
GPF Bonds	7.10%	33.91	0.00	6.78	27.13	1.93			
SBI DCRTPP YNR (PFC	12.50%								
Takeover)		392.02	0.00	120.64	271.38	41.46			
REC	12.25%	426.04	0.00	75.60	350.44	47.56			
State Bank of India(RGTPP) (PFC Takeover)	11.45%	438.30	0.00	101.64	336.66	44.37			
APDP Loan	12.50%	2.96	0.00	0.15	2.81	0.36			
Punjab National Bank (Andhra Takeover)	8.65%	1.05	0.00	1.05	0	0.05			
Punjab National Bank (Andhra Takeover Hisar)	8.65%	19.40	0.00	19.40	0	0.84			
Punjab National Bank (REC Takeover)	12.25%	102.25	0.00	20.52	81.73	11.27			
Nabard Loan	5.25%	34.49	0.00	11.50	22.99	1.71*			
Total		1450.42	0.00	357.28	1093.14	149.55			

 Table 6-3: Pre-Restructuring Loan Portfolio & Repayments schedule excluding Unit-6, PTPS (Rs. Cr.)

\* Total Interest during the year excluding solar business 149.55-1.71= Rs 147.84Cr

Table 6-4:Post -Restructuring (Actual) Loan Portfolio and Int. & Fin. Charges (Rs. Cr.)

Particulars	Rate of	Opening	Additions	Repayments	Closing	Interest
	Interest	Bal	during the year	during the year	Balance	during the year
GPF Bonds	7.10%	33.91	0.00	6.78	27.13	1.93
SBI DCRTPP YNR	-	0.00	0.00	0.00	0.00	0.00
REC	7.75%	377.93	0.00	75.58	302.35	27.08
State Bank of India(RGTPP)	-	0.00	0.00	0.00	0.00	0.00
APDP Loan	12.50%	2.96	0.00	0.15	2.81	0.37
Punjab National Bank (Andhra Takeover)	8.50%	0.00	0.00	0.00	0.00	0.00
Punjab National Bank (Andhra Takeover Hisar)	8.50%	0.00	0.00	0.00	0.00	0.00
Punjab National Bank	8.50%	0.00	0.00	0.00	0.00	0.00
Nabard Loan	5.25%	34.49	0.00	11.50	22.99	1.71*
Punjab National Bank(SBI Takeover)		0.00	0.00	0.00	0.00	0.00
Total		449.29	<b>0.00</b>	94.01	355.28	31.09

\*Excluding solar business of Rs 1,.71Cr the IFC is Rs 29.38Cr

117. As per the approved Tariff order dated 18.02.2021, HPGCL is proposing to pass on 50% of the savings on interest and finance charges to the beneficiaries on account of restructuring of loan and consider the true up of interest & finance charges as given in the below table:

Particular	Approvedinterest&FinanceCharges	Actual interest & Finance Charges	Pre- restructuri ng interest & Finance Charges	Savings on account of restructu ring of loan	Allowable interest & Finance Charges	Reco vered by HPG CL	True -up
1	2	3	4	5= 4-3	6=3+50%(5)	7	8=6- 7
Int.&Fin. Charges (A)	104.77	29.38	147.84	118.46	88.61	62.47	26.1 4
Int. On Normative Debt(B)					0.23		0 .23
Total True up of Int.& Fin. Charges(A+ B)	104.77	29.38	147.84	118.46	88.84	62.47	26.37

Table 6-5:Interest & Finance Charges (Rs. Cr.)

118. The Hon'ble Commission is hereby requested to kindly approve the true-up of Rs 26.37 Cr on account of interest and Finance Charges.

#### **Return on Equity**

- 119. The Hon'ble Commission vide its order dated 18.02.2021 (page 102/103) has adjudicated the issue of Return on Equity as under:
  - " iii Return on Equity

The Commission observes that HPGCL has been claiming RoE @ 14% on its eligible equity. The Commission, in the present order, has restricted the same to 10% amounting to Rs 210.938Crore. It needs to be noted that Return on Equity is provided to the owners of the shared capital, in this case, the State Government. The said return ought to have gone to the State Government in the form of dividend. It is observed that HPGCL is neither paying dividend to the State Government nor utilizing the same for funding of its new capex. Hence, the Commission orders that RoE allowed by the Commission shall be adjusted against RE subsidy payable by the State Government. This issue also address the issue of unpaid subsidy to a certain extent and the cost of additional working capital borrowings of the Discoms."

120. It is worth to apprise that HPGCL has opted for an appeal vide Appeal No 150/2021 at

Hon'ble APTEL on the above said directive for adjusting of RoE against subsidy being paid

by Government to DISCOMs. The same is pending for adjudication.

- 121. It is further apprised that as per the Directives of the Hon'ble Commission Govt of Haryana has adjusted against the subsidy amounting to Rs 146.45 Crore out of which only Rs 140 Crore has been recovered under tariff from DISCOMs. The same is required to be true-up after the adjudication of the matter by APTEL.
- 122. In view of the above, the details of opening equity, equity addition and required return of equity considered unit-wise for FY 2021-22 is summarized in the table below **for intimation only**:

Plants	Opening	Additions	Closing	RoE
PTPS – 7	218.04	-	218.04	21.80
PTPS – 8	218.02	-	218.02	21.80
DCRTPP-1	251.165	0.256	251.421	25.13
DCRTPP-2	251.115	0.256	251.371	25.12
RGTPP-1	494.683	0.206	494.889	49.48
RGTPP-2	492.973	0.041	493.014	49.30
Hydel	18.355	-	18.355	1.84
Total	1944.35	0.759	1945.109	194.47

Table 6-6:Details of Equity Employed excluding Unit 6 (Rs. Cr.)

#### Table 6-7:True-up of RoE (Rs Cr.)

Approved	Actual RoE	Recovered	Variance in	True up
RoE (A)	(В)	RoE (C)	RoE Cost (B-C)	claimed (E)
195.26	194.47	140.21	54.26	

#### Cost of Oil

123. As per the Regulation 31 of the MYT Regulation 2019 the Specific Oil Consumption becomes the part of the ECR as under

#### *"31 ENERGY CHARGES OR VARIABLE CHARGES FOR THERMAL POWER PROJECTS*

(*a*) The Energy charges or variable charges shall cover the main fuel cost & secondary fuel oil and shall be payable for the total energy scheduled to be supplied to a beneficiary during the calendar month on ex-power plant basis, at the specified variable charge rate, with fuel price adjustment.

(b) The Energy charge for the month shall be worked out on the basis of ex-bus energy scheduled to be sent out from the generating plant in accordance with the following formula:

#### Energy charge or variable charge (Rs)

= Energy Charge Rate (Rs. / kWh) x Scheduled Energy (ex-bus) for the month (kWh) Note: Till the time intra state ABT is implemented, 'scheduled energy' may be read as 'actual energy sent'. (c) Energy charge rate (ECR) in Rs. per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formula: (i) In case secondary fuel Oil cost is the part of ECR:

[[{SHR-(SFCXCVSF) X LPPF}/CVPF]+(SFCXLPSF)]x{100/(100-Aux)} (ii) In case secondary fuel Oil cost is not the part of ECR [{SHR-(SFCXCVSF) X LPPF}/CVPF]x{100/(100-Aux)}...."

124. Further, the reference is invited to Regulation 29 of MYT 2019, wherein it has been

guided as under:

"29. EXPENSES ON SECONDARY FUEL OIL FOR THERMAL POWER PROJECTS (a) Expenses on secondary fuel oil (in Rs.) shall be computed corresponding to normative secondary fuel oil consumption (SFC) specified in this Regulation, in accordance with the following formula:

Expenses on secondary fuel oil (in Rs.) = SFC x LPSFix NAPAF x 24 xNDY x IC x 10...

(b) Initially, the landed cost of secondary fuel oil shall be considered based on the weighted average price of secondary fuel oil during the three preceding months and in the absence of landed costs for the three preceding months, latest procurement price for the generating plant, before the start of the year shall be considered (c) The secondary fuel oil expenses shall be subject to fuel price adjustment at the end of each year of tariff period as per following formula:

SFC x NAPAF x 24 x NDY x IC x 10 x (LPSFy - LPSFi)....""

125. It is worth to apprise that HPGCL PLF remains on lower side. The main reason attributable to the same is placing lower despatch instructions by DISCOMs, due to the reasons better known to them. As per Regulation 31 (c) (i), HPGCL proposes the true up of Oil Cost as under:

Table 6-8:Details Cost of Oil excluding Unit-6, PTPS (Rs Cr.)

Actual	Recovered through ECR	True-up of Oil
12.10	14.18	(2.08)

Hon'ble Commission is requested to approve true-up of (Rs2.08 Cr) on account of oil 126. cost for FY 2021-22 as submitted above.

## Interest on working Capital

127. Interest on working capital amounting to Rs 92.51 Cr has been allowed by the Hon'ble Commission in its order dated 18.02.2021 regarding generation tariff for FY 2021-22 after considering the average coal and oil prices without any fuel price escalation as proposed by HPGCL. However, there has been variation in prices of coal and oil during the financial year in consideration for true-up. Therefore, while computing the truing-up of working capital for FY 2021-22, actual rate of coal has been considered.

- 128. Due to variation in Fuel prices, the interest on normative working capital requirement for FY 2021-22, as per the approved norms of the HERC, has increased to **Rs 94.52Crore** against the approved interest on working capital of **Rs 92.51Crore**.
- 129. As per HERC MYT regulation 2019, the Interest on working capital on normative basis is under:

"22. INTEREST ON WORKING CAPITAL

- **22.1** For the purpose of computing working capital the components mentioned in the table below shall be considered:
  - "I. Coal-based Thermal Generating Plants:
  - a) Cost of coal for 01 months corresponding to the normative availability;
  - b) Cost of secondary fuel oil for 01 months corresponding to the normative availability;
  - c) Normative O&M expenses for 1 (one) month;
  - d) Maintenance spares @ 10% of the O&M expenses;
  - e) Receivables equivalent to fixed and variables charges for 1 (one) month for sale of electricity calculated corresponding to normative availability."
- 130. However, the HPGCL is claiming the true-up of IWC on the basis of MYT 2019 as under:

*"12. INCENTIVE AND PENALTY FRAMEWORK* 

12.1 Various elements of the ARR of the generating company and the licensee will be subject to incentive and penalty framework as per the terms specified in this regulation. The overall aim is to incentivize better performance and penalize poor performance, with the base level as per the norms / benchmarks specified by the Commission.

12.2 The elements of ARR of generating company and licensees to which incentive and penalty framework shall apply are as follows:

(a) Common for generating company and licensees

(i) Operation & maintenance expenses-Applicable when the actual expenses fall below or exceed the level specified by the Commission.

(ii) Interest on new long-term loans- Applicable when interest rate falls below or exceeds the level specified by the Commission.

*(iii) Restructuring of capital cost - Applicable when there is a benefit from restructuring of capital cost.* 

*(iv)* Interest on working capital- Applicable when interest rate falls below or exceeds the level specified by the Commission"

(vi) Restructuring of loan portfolio- Applicable when there is a net benefit from restructuring of loan portfolio".

131. HERC has approved the Interest on Working Capital @8.25% as per Regulation 22.2 of MYT 2019. However, as the rate of interest remains the same, thus only the variance on

account of cost of fuel is the sole reason for increase in IWC.

132. The below table summarizes True-up of interest on working capital for FY 2021-22.

#### Table 6-9:Detail of WC & IWC excluding Unit-6,PTPS (Rs Cr)

S.No	Particular	Approved IWC (Rs. Cr) @ 8.25%	Normative(Revised) IWC (Rs. Cr) @ 8.25%
1	Coal Stock	435.68	447.81
2	Oil Stock	2.36	2.35
3	O&M Expenses	58.22	58.22
4	Maint. Spares	69.18	69.18
5	Receivables	555.88	568.17
6	Total W/C Requirement	1121.32	1145.73
	Int. on W/C	92.51	94.52

Particular	Approved IWC	Normative IWC	Actual	Recovered	True-Up
	@8.25% (A)	@ 8.25% (B)	(C)	IWC (D)	Claimed
Interest on WC	92.51	94.52	98.59	64.00	

#### Table 6-10: True-up of IWC excluding Unit-6, PTPS (Rs Cr.)

133. HPGCL submits that shortfall in recovery of IWC is on account of non-availability of RGTPP2 & DCRTPP1, thus no true-up is proposed in the matter.

## Summary of the True-up

134. Based on the above submission, HPGCL summaries proposed total true-up for FY 202122 considering Regulation 8.3.8, Regulation 13.4, Regulation 22, Regulation 29,
Regulation 30, of MYT Regulation, 2019 as under:

Table 6-11:Total True Up	(in Cr)	excluding	Unit-6.PTPS
Tuble o II. Total True op	(	cheraaning	01110 0,1 11 0

	0&M	Deprecia	Oil	IWC	Interest &	RoE	Total
	Expense	tion Cost	Expense		Fin.		True-up
Total	261.18	(1.78)	(2.08)	0	26.37		283.69

#### Non-Tariff Income

135. Detail of Other Non-operating income included in the other income as per the Audited Balance Sheet for the FY 2021-22 is as under:

Table 6-12:Non-Operating income (R	s. Cr.)
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Particulars		Amount in Cr.	
Income from sale of scrap		3.75	
50% of Other income		1.25	
Total		5.0	

## Net True -Up

136. Net True-up for the FY 2021-22 after reducing the other non-operating income is given as under:

Table 6-13:Net True-up after adjusting Non-Tariff income (Rs. Cr.) excluding Unit-6,PTPS

Particulars	Amount (Rs. in crore)
Total True up as per Table-27	283.69
Less: Non-operating income as per Table-28	5.00
Net True up	278.69

137. HPGCL requests Hon'ble Commission to approve True-up as submitted above for FY 2021-22 along with applicable carrying cost. The carrying cost should be allowed as per the regulations of MYT 2019 along with LPS, if any delay in realization of payments beyond the stipulated time on DISCOMs as per Clause 43 of MYT Regulation 2019. However, HPGCL reserve its right to claim any variance on account of the adjudication of the matters pending at APTEL.

## B. INTIMATION OF EXPENSES OF UNIT-6, PTPS:

## **Operation and Maintenance Expenses (Rs. Cr.)**

#### Table 6-14: Operation and Maintenance Expenses of Unit-6

Particular	FY 2021-22 (Recovered)	FY 2021-22 (Actual)
Employee Cost	76.81	76.81
Repair & Maintenance	8.51	14.02
Administrative & General	1.56	1.89
Total	86.88	92.72

## Depreciation

Table 6-15: Depreciation details of Unit-6

S.No	Unit	Actual as per audited accounts*	Depreciation on GAAP Spares	Depreciation on account of Ind AS	Net allowable depreciation	Recovered Depreciation
Α	В	D	E	F	G=(D-E-F)	н
1	PTPS- 6	1.86	0.08	1.31	0.47	6.69

- 138. Pre-Restructuring Loan Portfolio & Repayments schedule for FY 2021-22 (Rs. Cr.) No longterm loans are pending against unit-6 PTPS Panipat.
- 139. Actual Loan Portfolio and Int. & Fin. Charges for FY 2021-22 (Rs. Cr.): No long term loans are pending against unit-6 PTPS Panipat.
- 140. Interest & Finance Charges (in Rs. Cr.) for FY 2021-22: No long term loans are pending against unit-6 PTPS Panipat.
- 141. Details of Equity Employed in FY 2021-22 (Rs. Cr.)

#### Table 6-16: Details of Equity employed of Unit-6

Plants	Opening	Additions	Closing	RoE @ 10%
PTPS – 6	156.84	-	156.84	15.68

## <u>Return on Equity</u>

#### Table 6-17: Details of RoE recovered of Unit-6

Actual	Recovered*
15.68	-

\* Note :- RoE in respect of the unit-6, PTPS, Panipat has not been paid by the Discoms, as in Fy20-21, No RoE has been allowed by Commission and claim is subject to outcome of the Appeal DFR/216/2020 & Appeal No 150/2021, thus, no RoE has been recovered for the said duration of FY 2021-22.

# <u>Cost of Oil</u>

Table 6-18: Detail of Oil of Unit-6

Actual	Recovered
2.91	0.98

# Interest on Working Capital

Table 6-19:	Details	of IWC	in Cr	of Unit-6
10010 0 101	Details	0		0. 0

S.No	Particular	Actual as per Balance Sheet	Recovered
	Int. on W/C	2.37	5.33

# Non-Operating Income

Nil

#### **CHAPTER 7**

## A7 MID-YEAR PERFORMANCE REVIEW FOR FY 2022-23 AND GENERATION TARIFF FOR FY 2023-24

- 142. HPGCL, in this section, submits the performance parameters for mid-year performance review for FY 2022-23 in line with Regulation 11 of the HERC MYT Regulations, 2019.
- 143. Hon'ble Commission, in its previous orders, has not carried out mid-year review. Accordingly, HPGCL has not submitted the tariff impact for the midyear performance review for FY 2022-23. However, performance indicators and factors affecting tariff on account of Change in law or on account of 2<sup>nd</sup> Amendment in MYT Regulation,2019 have been submitted for the year for kind consideration of the Hon'ble Commission. Thus, for mid-year review, HPGCL reserve its right to claim the impact of Change in Law event and impact of 2<sup>nd</sup> Amendment of MYT Regulation on the tariff components / Fixed Charge at the time of seeking true-up.
- 144. Hon'ble Commission may take the note that for FY 2023-24, the tariff has been proposed on the basis of impact of Change in Law i.e. Notification of HWRA and shifting of certain heads under Fixed Cost has been proposed while claiming the fixed charge for FY 2023-24.
- 145. As per MYT regulation 2019, the oil cost becomes the part of Energy Charge Rate (ECR) and has been calculated at normative basis. However, on account of low loading of the HPGCL units and frequent start & stop operations, the limits provided in the ECR as per regulation for specific oil consumption is on lower side at current PLF, HPGCL reserve its right to claim the under recovery of Oil cost in future true up as per Regulation 29 of MYT Regulation 2019.
- 146. HPGCL reserves its rights for making additional submissions at filing of true up, if required in the matter.

## **Technical Parameters**

## Normative Annual Plant Availability Factor (NAPAF)

147. It is worth to apprise the Hon'ble Commission that Hon'ble APTEL vides order dated 24.09.2021 has allowed the tariff to be recovered for Unit-6, PTPS as per the PPA including RoE. Thus, HPGCL is proposing the tariff for Unit-6, PTPS for future as per the instant regulations.

- 148. The Hon'ble Commission may take the note of the present year scheduling trends of first half of FY 2022-23, wherein HPGCL Units are being scheduled at more than normative levels prescribed under the instant regulations on account of failure in contractual obligation of various IPPs and increase in demand. Thus, it is expected that HPGCL shall be remains operative throughout the year as per the intimation dated 25.08.2022 by beneficiaries.
- 149. The Hon'ble Commission has reduced the R&M/A&G to 50% while adjudicating the tariff of PTPS Units. It is therefore, requested that the PTPS tariff for next FY 2023-24 needs to be allowed as per the instant MYT Regulations, 2019 considering the present circumstances. This helps HPGCL to make the O&M practices as per the norms, and make the units available in optimum conditions as per the requirement.
- 150. HPGCL is here by invite the attention of the Hon'ble Commission in lieu of intermittent scheduling of PTPS Units as envisaged in its order dated 22.02.2022 has reduced the R&M / A&G for PTPS Units. However, HPGCL plants are presently scheduling at beyond normative as envisages in MYT Regulations, 2019, thus, HPGCL reserve its right to claim the full true-up as per the instant regulations while claiming the true up for FY 22-23. Therefore, HPGCL proposes the same NAPAF for all thermal Units for FY 2022-23 in line with Tariff Order dated 22.02.2022 and for the FY 2023-24 in line with HERC MYT Regulation, 2019 tabulated as under:

S.No	Unit #	Approved	Proposed	
		FY 22-23	FY22-23	FY 23-24
1	PTPS 6	55.00%	55.00%	85.00%
2	PTPS 7	55.00%	55.00%	85.00%
3	PTPS 8	55.00%	55.00%	85.00%
4	DCRTPP 1	85.00%	85.00%	85.00%
5	DCRTPP 2	85.00%	85.00%	85.00%
6	RGTPP 1	85.00%	85.00%	85.00%
7	RGTPP 2	85.00%	85.00%	85.00%
8	WYC Hydel	43.00%	43.00%	43.00%

#### Table 7-1:NAPAF for FY 2022-23 and FY 2023-24

## **Auxiliary Consumption**

151. HPGCL is hereby proposes the Auxiliary consumption for FY 2023-24 in line with MYT Regulations 2019 & for FY 2022-23 as already approved by the Hon'ble Commission is as tabulated below:

#### Table 7-2: Auxiliary Consumption (%) for FY 2022-23 and FY 2023-24

S.N	Unit #	Approved		oposed
5.11	Unit #	FY 22-23	FY22-23	FY 23-24
1	PTPS 6	9.00%	9.00%	9.00%
2	PTPS 7	8.50%	8.50%	8.50%
3	PTPS 8	8.50%	8.50%	8.50 %
4	DCRTPP 1	8.50%	8.50%	8.50%
5	DCRTPP 2	8.50%	8.50%	8.50%
6	RGTPP 1	6.00%	6.00%	6.00%
7	RGTPP 2	6.00%	6.00%	6.00%
8	WYC Hydel	1.00%	1.00%	1.00%

### Secondary Fuel Consumption (SFC)

152. HPGCL proposes the Secondary Fuel Consumption for FY 2022-23& FY 2023-24 as per HERC MYT Regulations, 2019.

S.No	Unit #	Approved	Propos	sed
		FY 22-23	FY22-23	<b>FY 23</b> -24
1	PTPS 6	1.00	1.00	1.00
2	PTPS 7	0.50	0.50	0.50
3	PTPS 8	0.50	0.50	0.50
4	DCRTPP 1	0.50	0.50	0.50
5	DCRTPP 2	0.50	0.50	0.50
6	RGTPP 1	0.50	0.50	0.50
7	RGTPP 2	0.50	0.50	0.50

#### Table 7-3:SFC (ml/kWh) for FY 2022-23 and FY 2023-24

- 153. As per MYT regulation 2019, the oil cost becomes the part of Energy Charge Rate (ECR) and has been calculated on normative basis. However, on account of low loading/scheduling of the HPGCL units and frequent start & stop operations, the norms provided as per regulation for specific oil consumption is on lower side at current PLF/ loading of Units.
- 154. HPGCL reserve its right to claim the deficit in respect of the Oil consumption at the time of true-up as per Regulation 29 of MYT Regulation, 2019.

## **Station Heat Rate (SHR)**

155. The SHR for FY 2023-24 is being proposed as per norms specified in HERC MYT Regulations, 2019 as under:

#### Table 7-4:SHR (kCal/kWh) for FY 2022-23 and FY 2023-24

S.N	SHR(kcal/kWh)	Approved	Proposed	
		FY 22-23	FY 22-23	FY 23-24
1	PTPS 6	2550	2550	2550
2	PTPS 7	2500	2500	2500
3	PTPS 8	2500	2500	2500
4	DCRTPP 1	2344	2344	2344
5	DCRTPP 2	2344	2344	2344
6	RGTPP 1	2387	2387	2387
7	RGTPP 2	2387	2387	2387

## Calorific Value and Price of fuel

156. The GCV and cost of coal& secondary fuel (oil) has been proposed for FY 2023-24 as per the actual weighted average of coal & landed of oil during April to Sept. of FY 2022-23 are as under:

#### Table 7-5: Proposed Gross Calorific Value & cost of coal for FY 2023-24

Particulars	PTPS 6	PTPS 7&8	DCRTPP	RGTPP
Gross Calorific Value of Coal (kcal/Kg)	3751	3660	3448	3348
Average landed cost of Coal (Rs/MT)	5840.84	5884.96	5908.26	5964.42

#### Table 7-6: Proposed Gross Calorific Value & cost of oil for FY 2023-24

Particulars	PTPS	DCRTPP	RGTPP
Gross Calorific Value of oil (kcal/L)	10552	10507	10672
Average landed cost of oil (Rs/KL)	84595.73	64273.29	86767.692

#### Table 7-7: Gross Calorific Value & cost of domestic coal & imported coal for FY 2023-24

Particulars	PTPS6	PTPS 7&8	DCRTPP	RGTPP
Gross Calorific Value of Domestic Coal in Kcal/Kg	3675	3585	3348	3214
Average landed cost of domestic coal in Rs/MT	5039	5146	5036	4984
Gross Calorific Value of Imported Coal in Kcal/Kg	4957	4957	4991	5097
Average landed cost of Imported coal in Rs/MT	18727	18803	19340	18855

#### **Energy Charge Rate**

157. HPGCL is proposing for computation of ECR as per Regulation31 of HERC MYT Regulation,
2019 on the basis of actual fuel consumed on blended basis from April, 2022 to
Septemeber,2022 as under:

Unit	Generation (Ex-bus)*	Per Unit Variable Cost
	MU	Rs/ Unit
PTPS 6	1426.83	4.438
PTPS 7	1707.94	4.430
PTPS 8	1707.94	4.430
DCRTPP 1	2049.53	4.415
DCRTPP 2	2049.53	4.415
RGTPP 1	4211.05	4.560
RGTPP 2	4211.05	4.560

Table 7-8:Computation of ECR for FY 2023-24 (\* Leap year)

### **Annual Fixed Cost**

158. HPGCL is projecting following components of fixed cost for FY 2023-24 as per HERC MYT Regulations, 2019 and as amended thereof.

## Impact of 2nd Amendment under MYT Regulation, 2019 on O&M

159. The Hon'ble Commission vide its order dated 31.01.2022 has carried 2nd Amendment in MYT Regulations, 2019 wherein under Regulation 31 (C) & 33 has been modified as under:

"31 (c) Energy charge rate (ECR) in Rs. per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formula:
(i) In case secondary fuel Oil cost is the part of ECR:
[[{SHR-(SFCXCVSF) X LPPF}/CVPF]+(SFCXLPSF)]x{100/(100-Aux)}
(ii) In case secondary fuel Oil cost is not the part of ECR

[{SHR-(SFCXCVSF) X LPPF}/CVPF]x{100/(100-Aux)}

Where

AUX = Normative auxiliary energy consumption in percentage;

CVPF = Gross calorific value of primary fuel as received, in kCal per kg or per litre as applicable;

CVSF = Gross calorific value of secondary fuel in kCal per ml;

ECR = Energy charge rate in Rs. per kWh sent out;

SHR = Normative Station Heat rate in kCal per kWh;

SFC = Normative Specific fuel oil consumption in ml/kWh

LPPF =Weighted average landed price of primary fuel in Rs./kg.

LPSF = Weighted average landed fuel cost of Secondary Fuel in Rs./ml during the month." **31 (d)** Gross Calorific Value of Primary Fuel:

(1) The gross calorific value for computation of energy charges shall be done in accordance with 'GCV as received' basis."

33. Kcm shall be the weighted average GCV of coal on as received basis for the month in Kcal / Kg."

160. After the above amendments comes in force, wherein the Hon'ble Commission has taken the cautious call to amend the regulation from "As Fired Basis" to "As Received basis", which mandate HPGCL to shift of certain expenditures under O&M. The charges in respect of Coal Handling plant after unloading of coal by railway and charges paid to Railways etc become the part of O&M cost as per the instant regulation in the matter.

- 161. Thus, Hon'ble Commission may take the note of the same and allow HPGCL to shift expenses incurred in the plant after landing of coal i.e. "As Received" from Railways unloading point under O&M head for FY 2023-24 and also for FY 2022-23.
- 162. The Commission is further requested to allow claim of the said expenses on actual basis additionally, till the present duration of Regulation i.e. 2024 and may take the same as base for next control period of MYT Regulations while calculating the O&M expenses for HPGCL Plants.
- 163. Accordingly, the split-up of detailed O&M proposed on the basis of Regulation 28 & 31 of MYT regulation as amended on dated 31.01.2022 has been proposed as under:

Plant/Unit	Expenditure required to	Expenditure required to be booked under O&M					
	As per balance sheet of FY 21-22	As per Regulation with escalation @2.93% for FY 2023-24 on the basis of FY 21-22					
PTPS 6,7,8	17.40	18.43					
DCRTPP	15.64	16.57					
RGTPP	17.41	18.45					

Table 7-9:Expenditure of CHP needs to shifted to O&M

### O&M Expense

- 164. Hon'ble Commission has prescribed the norms for O&M Expenses (in Rs. Lac per MW) for FY 2023-24 under Regulation 28 of HERC MYT Regulations, 2019 or as amended thereof.
- 165. Considering above submissions HPGCL is proposing the O&M expense for FY 2023-24 as per the Hon'ble Commission in HERC MYT Regulation 2019 as amended thereof along with additional impact of shifting of certain heads and change in law impact, is as under:

S.No	Unit #	Approved		Proposed as per MYT,2019 for FY 23-2			
		FY 22-23	As per Regulation 28 of 2 <sup>nd</sup> Amendment	Additional Expenses as per Regulation 31 of 2 <sup>nd</sup> Amendment in ECR	Impact of change in water charges considering HWRA Notification*	Total	
1	PTPS 6	93.003	106.827	5.45	2.68	114.96	
2	PTPS 7	91.477	110.75	6.49	3.2	120.44	
3	PTPS 8	91.477	110.75	6.49	3.2	120.44	
4	DCRTPP 1	114.835	118.2	8.29	4.85	131.34	
5	DCRTPP 2	114.835	118.2	8.29	4.85	131.34	
6	RGTPP 1	139.082	143.16	9.23	5.63	158.02	
7	RGTPP 2	139.082	143.16	9.23	5.63	158.02	
8	WYC Hydel	28.342	29.48	-	-	29.48	
9	Total	812.132	880.52	53.47	30.04	964.03	

Table 7-10: O&M Expenses (Rs. Cr.)

\* as prayed in Chapter 5.

166. Hon'ble Commission is requested to approve the O&M expenses for FY 2023-24 as Rs.964.03 Crore.

### **Depreciation**

- 167. Depreciation for FY 2023-24 has been proposed on the basis of opening GFA as on 01.04.2022 and closing GFA as on 31.03.2023 and after taking into consideration of the earlier disallowances made by the Hon'ble Commission in previous years and also with the additions of the proposed CAPEX Schemes.
- 168. Opening Gross Fixed Assets for FY 2021-22 is as per the FAR of FY 2020-21 and Closing GFA for FY 2023-24 is after considering the additions of the proposed CAPEX scheme completed in the respective years, as stated in Chapter 3, is tabulated below:

Sr. No.	Unit	GFA 01- 04-2021	Addition FY 2021- 22	deletion FY 2021- 22	GFA 01- 04-2022	Addition FY 2022- 23	Addition FY 2023- 24	GFA as on 31-3- 2024
1	PTPS – 5	291.15			291.15			291.15
2	PTPS – 6	996.82	0.02		996.84		5.20	1002.04
3	PTPS – 7	945.52			945.52	0.25	9.16	954.92
4	PTPS -8	955.20	0.20	0.00	955.39	1.05	9.16	965.60
5	DCRTPP-1	1,146.61	1.89		1148.49	0.78	4.91	1154.18
6	DCRTPP-2	1,143.96	1.89		1145.85	0.78	4.91	1151.53
7	RGTPP-1	2,189.54	1.39		2190.95	7.96	12.45	2211.35
8	RGTPP-2	2,174.70	0.44		2175.15	7.97	12.45	2195.56
9	Hydel	208.29	0.09		208.38		7.00	215.38
	Total	10,051.79	5.92	0.00	10057.71	18.77	65.23	10141.71

Table 7-11: Gross Fixed Assets for FY2023-24 (Rs Cr)

169. Hon'ble Commission in its earlier orders has disallowed certain capitalization, accordingly the allowable GFA is tabulated as under;

Unit	GFA as on 01.04.22- exclusive of Ind AS	Disallowances – GAAP spares	Allowable GFA as on 01.04.2022	Addition during 2022-23	Allowable GFA as on 01.04.2023	Addition during 2023-24	Allowable GFA as on 01.04.2024
PTPS – 5	291.15	34.47	256.67		256.67		256.67
PTPS – 6	996.84	1.07	995.77		995.77	5.20	1000.97
PTPS – 7	945.52	2.35	943.17	0.25	943.42	9.16	952.58
PTPS -8	955.39	5.53	949.86	1.05	950.91	9.16	960.07
DCRTP-1	1148.49	13.65	1134.85	0.78	1135.62	4.91	1140.53
DCRTP-2	1145.85	13.65	1132.20	0.78	1132.98	4.91	1137.89
RGTPP-1	2190.94	37.76	2153.18	7.96	2161.14	12.45	2173.59
RGTPP-2	2175.15	37.76	2137.39	7.97	2145.35	12.45	2157.80
Hydel	208.38		208.38		208.38	7.00	215.38
Total	10057.71	146.23	9911.47	18.77	9930.24	65.23	9995.48

Table 7-12: Allowable GFA for FY 2023-24 (Cr.)

170. The depreciation has been considered on the basis of rate as notified in HERC, MYT Regulations, 2019.

- 171. Further, the Hon'ble Commission in its Order dated 31.10.2018 & 07.03.2019 has directed HPGCL not to claim depreciation on such disallowed capitalization (spares and decommissioning cost).
- 172. Thus, HPGCL in compliance with aforesaid directives has excluded such depreciation of for the purpose of tariff determination of FY 2023-24 and the net allowable depreciation is as under:

S.No.	Unit	Actual Depreciation	Depreciation on GAAP Spares	Depreciation on account of Ind AS	Net allowable depreciation
Α	В	D	E	F	G=(D-E-F)
1	PTPS – 6	3.42	0.08	1.31	2.02
2	PTPS – 7	32.07	0.15	1.82	30.10
3	PTPS – 8	31.16	0.32	3.19	27.65
4	DCRTPP-1	29.22	0.61	0.53	28.08
5	DCRTPP-2	29.90	0.61	0.89	28.39
6	RGTPP-1	48.52	1.23	0.73	46.55
7	RGTPP-2	51.45	1.23	0.96	49.26
8	Hydel	5.81	-	-	5.81
	Total	231.54	4.25	9.44	217.85

#### Table 7-13: Depreciation for FY 2023-24 (Rs Cr.)

173. Hon'ble Commission in its Order dated 31.10.2018 had directed HPGCL to maintain a memorandum accounts of allowed capitalization, spares & decommissioning cost capitalized, depreciation and net block of fixed assets. HPGCL has maintained the memorandum accounts as directed by Hon'ble Commission and the same is attached as **Annexure-P7** for kind consideration of the Hon'ble Commission.

## Interest & Finance Charges

- 174. Hon'ble Commission has approved the loan portfolio for HPGCL from time to time based on the approved CAPEX. Further, HPGCL by using its financial prudence has been successful in restructuring its loan portfolio to reduce the interest and finance charges.
- 175. The pre- restructuring and post restructuring loan portfolio of HPGCL have been presented in table 6.3 and 6.4 respectively.
- HPGCL is expecting to incur interest and finance charges amounting to Rs 22.13 Cr. in
   FY 2023-24 while the pre restructuring interest and finance charges for FY 2023-24 are
   Rs 75.39 Cr.
- 177. Therefore, there will be expected saving of Rs 53.27 Cr (Rs 75.39-22.13) in the interest and finance charges due to diligence and efficient financial management of HPGCL.

- 178. According to Clause 21.1 (v) of the HERC MYT Regulations 2019, HPGCL is eligible for incentive on the net savings resulting from restructuring of Ioan. Accordingly, HPGCL requests the Hon'ble Commission to approve interest expenses including incentive (50% of savings from restructuring) for FY 2023-24.
- 179. An amount of Rs. 5.43 crore of the equity contribution has been considered as normative debt @ 8.5% as per Regulation 19.2(b) of the HERC MYT Regulations 2019. The normative interest expense so incurred stands at Rs 0.23 Cr. The same has been added to the interest and finance charges for tariff computation of FY 2023-24.
- 180. The interest and finance charges for the FY 2023-24 so computed based on the above submissions are presented below;

FY 2023-24	Int. & Fin. Charges post restructuring	Int. & Fin. Charges pre restructuring	Savings due to restructuring	Incentive (50% of savings)	Total interest expense	Interest expense on normative loan	Final Interest Expense
1	2	3	4= (3-2)	5=50% of 4	6=	7	8=6+7
					(2+5)		
PTPS 6	0.38	0.38	0	0	0.38	-	0.38
PTPS 7	0.80	0.82	0.03	0.01	0.81	0.01	0.82
PTPS 8	0.86	0.88	0.03	0.01	0.87	0.01	0.88
DCRTPP-1	0.54	6.23	5.68	2.84	3.39		3.39
DCRTPP-2	0.54	6.23	5.68	2.84	3.39		3.39
RGTPP-1	9.24	30.17	20.92	10.46	19.71	0.11	19.82
RGTPP-2	9.24	30.17	20.92	10.46	19.71	0.11	19.82
WYC Hydel	0.52	0.52			0.52	-	0.52
Total	22.13	75.39	53.27	26.63	48.76	0.23	48.99

Table 7-14: Interest and finance charges for FY 2023-24 (Rs. Cr.)

# 181. Hon'ble Commission is requested to approve the same as interest and financial charges for FY 2023-24.

## **Return on Equity**

- 182. Hon'ble HERC in its order dated 22.02.2022 has approved the RoE at 10%. However, calculation of ROE is as per 2nd amendment dated 31 January 2022 of MYT regulation 2019, which can be claimed up to @ 12% for thermal and for Hydel up to @ 13% and also on 50% of allowable capital cost for the assets put to use during the year.
- 183. Accordingly, the equity employed and RoE for FY 2023-24 as per Regulation 20 of HERC MYT 2019 is tabulated below:

S.N	Unit#	Closing FY 2021-22	Additions FY 2022-23	Additions FY 2023-24	Closing FY 2023-24	Proposed RoE@ 12%/ 13%
1	PTPS – 6	156.84		1.04	157.88	18.95
2	PTPS – 7	218.04	0.05	1.83	219.92	26.39
3	PTPS – 8	218.02	0.21	1.83	220.06	26.41
4	DCRTPP-1	251.421	0.16	0.98	252.56	30.31
5	DCRTPP-2	251.371	0.16	0.98	252.51	30.30
6	RGTPP-1	494.684	1.59	2.49	498.77	59.88
7	RGTPP-2	492.974	1.59	2.49	497.06	59.65
8	Hydel	18.355		1.40	19.76	2.57
	Total	2101.705	3.75	13.05	2118.51	254.45

#### Table 7-15:Equity Employed (Rs Cr.)

### Interest on Working Capital (IWC)

- 184. Regulation 22.1 of HERC MYT Regulations, 2019 lists the components of working capital to be considered for estimating tariff. Further, Regulation 22.2 of the aforementioned Regulations states that the rate of interest on working capital shall be equal to the MCLR of the relevant financial year plus a maximum of 150 basis points.
- 185. Rate of interest on working capital is taken on the basis of latest MCRL as on dated 15.10.2022 @ 7.95% plus 1.50% margin (9.45%) as per Regulation no 22.2 of MYT Regulation 2019
- 186. HPGCL is presently proposing the IWC as per MYT, 2019 regulations for FY 2023-24 is tabulated as under;

Unit	Coal Stock	Oil Stock	O&M Expenses	Maint. Spares	Receivables	Total W/C Requirement	Int. on W/C
PTPS – 6	51.67	1.11	9.58	11.50	65.23	139.08	13.14
PTPS – 7	62.40	0.66	10.04	12.04	79.17	164.31	15.53
PTPS – 8	62.40	0.66	10.04	12.04	78.99	164.12	15.51
DCRTPP-1	74.80	0.60	10.95	13.13	93.06	192.55	18.20
DCRTPP-2	74.80	0.60	10.95	13.13	93.09	192.57	18.20
RGTPP-1	158.40	1.62	13.17	15.80	186.76	375.74	35.51
RGTPP-2	158.40	1.62	13.17	15.80	186.97	375.95	35.53
Hydel	-	-	2.46	4.42*	3.28	10.15	0.96
Total	642.86	6.86	80.34	97.88	786.55	1614.48	152.57

#### Table 7-16: Calculation of IWC (Normative)(Rs Cr)

\*Taken @15% as per 2<sup>nd</sup> Amendment

## **Total Fixed Cost**

187. Based on above submissions total fixed cost of HPGCL Plants for FY 2023-24 is tabulated below:

S.N	Unit	O&M	Depreciation	Interest & Finance Charges	Return on Equity	W/C Interest	Total Fixed Cost
1	PTPS – 6	114.96	2.11	0.38	18.95	13.14	149.54
2	PTPS – 7	120.44	30.25	0.81	26.39	15.53	193.42
3	PTPS – 8	120.44	27.97	0.87	26.41	15.51	191.20
4	DCRTPP-1	131.34	28.69	3.39	30.31	18.20	211.93
5	DCRTPP-2	131.34	29.00	3.39	30.30	18.20	212.23
6	RGTPP-1	158.02	47.79	19.71	59.88	35.51	320.91
7	RGTPP-2	158.02	50.49	19.71	59.65	35.53	323.40
8	Hydel	29.48	5.80	0.52	2.57	0.96	39.33
	Total	964.03	222.10	48.76	254.45	152.57	1641.94

#### Table 7-17: Annual Fixed Cost (Rs Cr)

- 188. HPGCL requests the recovery of all expenditure relating to petition filing fees including publication of notices etc. and any other statutory fees/ regulatory fees, taxes and levies from the beneficiaries as per actual.
- 189. The petition has been prepared based upon the information available and to the best of our knowledge and belief of HPGCL. In case any information/clarification is required, the same may please be asked for, so that the same can be provided /clarified.

## Summary of tariff computation for FY 2023-24

190. Based on above submissions the proposed tariff i.e. Total Capacity Charges and Energy Charge Rate (ECR) per kWh for FY 2023-24 is summarized as under:

Unit	<b>Total Fixed Cost</b>	Energy Charge Rate*
PTPS-6	149.54	4.438
PTPS-7	193.42	4.430
PTPS -	191.20	4.430
DCRTPP1	211.93	4.415
DCRTPP2	212.23	4.415
RGTPP1	320.91	4.560
RGTPP2	323.40	4.560
WYC	39.33	-
TOTAL	1641.94	

#### Table 7-18: Tariff Summary for FY 2023-24

\* on the basis of actual blended fuel consumed in first half

### **CHAPTER: 8**

## A8 PRAYERS

- 191. HPGCL humbly prays the Hon'ble Commission to:
  - a) Admit this Petition.
  - b) To direct DISCOMs that any new power source added by them needs to be compared on landed cost basis, and in case the same is costlier, shall not be allowed to schedule before exhausting HPGCL Units as proposed in Chapter2.
  - c) To approve the Revised Capital Investment Plan as proposed in Chapter 3.
  - d) To approve additional new capital investment plan in respect of CCTV installation at perimeter of PTPS & replacement of Fire tenders at DCRTPP as proposed in Chapter 3.
  - e) To accord in-principal approval along with tentative cost for installation of EV Charging stations at HPGCL plants & Head office as proposed in Chapter 3.
  - f) To declare revision in water charges by HWRA vide notification dated 15.07.2022 under "Change in Law" and allow appropriate recovery as proposed in Chapter 5.
  - g) To allow the fixed cost recovery of PTPS Units as per the norms envisaged in MYT Regulation,2019 as proposed in Chapter 5.
  - h) To take the note of savings yield by running Unit-6,PTPS against marginal cost of IEX.
  - To allow expense of Rs 50.45 Cr in respect of CHP as prayed in Chapter 6, as no other income source is with HPGCL to adjust the same.
  - j) To allow Additional Auxiliary Consumption of Rs 7.40Cr as prayed in Chapter6, as no other income source is with HPGCL to adjust the same.
  - k) To allow true up of A&G of Rs 2.97 Cr as prayed in Chapter 6.
  - To allow the True-up amounting to Rs 278.69.Cr with appropriate holding cost as prayed in Chapter 6 excluding Unit-6, PTPS.

- m) To take the note of expenditure of Unit-6,PTPS not offered for True-up as submitted in Chapter 6.
- Allow to recover the legitimate expenses which needs to be shifted under O&M charges on account of 2<sup>nd</sup> Amendment of MYT Regulation 2019 as prayed in Chapter 7.
- Allow the Normative fixed cost by considering the additional impact of Change in Law in respect of water charges and shifting of expenditures on account of 2<sup>nd</sup> Amendment of MYT Regulation 2019 and Normative ECR for FY 2023-24 as submitted in Chapter 7.
- p) Allow recovery of all expenditure relating to petition filing fees including publication of notices etc. and any other statutory fees/ regulatory fees, taxes and levies from the beneficiaries as per actual.
- q) Condone any inadvertent omissions / errors / delays / short comings and permit the applicant to add/ change/modify/ alter this filing and make further submissions as may be required at later stage as the filing is being done based on the best available information.
- r) Treat the filing as complete in view of substantial compliance as also the specific requests for waivers with justification placed on record.

