

COMMISSION'S ORDER

ON

TRUE-UP FOR FY 2020-21, MID-YEAR PERFORMANCE REVIEW FOR FY 2021-22 AND DETERMINATION OF GENERATION TARIFF FOR THE FY 2022-23

Case No. HERC/PETITION NO. 44 of 2021

22nd February, 2022

HARYANA ELECTRICITY REGULATORY COMMISSION
BAYS NO. 33-36, SECTOR-4, PANCHKULA-134112

https://herc.gov.in

Abbreviations

Abbreviation	Description
AAC	Additional Auxiliary Consumption (power consumed on account of RSD)
ABT	Availability Based Tariff
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
ECR	Energy Charge Rate (Rs/kWh)
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
Gol	Government of India
HERC	Haryana Electricity Regulatory Commission
HPGCL	Haryana Power Generation Corporation Limited
Ind AS	Indian Accounting Standard
IoWC	Interest on Working Capital
loB	Indian Overseas Bank
MCLR	Marginal Cost Based Lending Rate
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
NAPAF	Normative Annual Plant Availability Factor
0&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

Abbreviation	Description					
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					
STP	Sewage Treatment Plant					
TO	Tariff Order					
UHBVN	Uttar Haryana Bijli Vitran Nigam Limited					
WYC	West Yamuna Canal					

- ✓ Current Year refers to Financial Year 2021-22
- ✓ Previous Year refers to Financial Year 2020-21
- ✓ All currency figures used in this Petition, unless specifically stated otherwise, are in Rs. Crore_

BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION BAY NO. 33-36, SECTOR-4, PANCHKULA-134 112

Case No. HERC/PETITION NO. - 44 of 2021

Date of Hearing : 12.01.2022 Date of Order : 22.02.2022

QUORUM

Shri R.K. Pachnanda Chairman Shri Naresh Sardana Member

IN THE MATTER OF

Petition filed by Haryana Power Generation Corporation Ltd. (HPGCL) for approval of Trueup for the FY 2020-21, Mid-Year Performance Review for the FY 2021-22 and Determination of Generation Tariff for the FY 2022-2023.

AND

IN THE MATTER OF

HPGCL, Panchkula Petitioner HPPC, Panchkula Respondent

Present

- 1. Shri Mohammed Shayin, IAS, MD, HPGCL.
- 2. Shri Amit Gupta, Director (Finance), HPGCL
- 3. Shri Umesh K. Agarwal, Chief Engineer, Regulatory Affairs, HPGCL
- 4. Shri Rohitas Bansal, CFO, HPGCL
- 5. Shri Seema Sidana, AE, HPPC

ORDER

- 1 The Petitioner herein i.e. HPGCL, vide its Memo No. 219/HPGC/Reg-522 dated 29.11.2021, has filed the present petition for approval of true-up for the FY 2020-21, and determination of Generation Tariff for the FY 2022-23 under Section 61 and 62 of Electricity Act, 2003 read with the MYT Regulations, 2019.
- In order to afford an opportunity to the general public / Stakeholders to file their objections / suggestions / comments, the petition filed by HPGCL was made available on the website(s) of the Commission as well as that of the petitioner.

3 The public notice was issued by HPGCL in the following Newspapers for inviting objections.

Name	Language	Date of publication
The Tribune	English	02.12.2021
Dainik Jagran	Hindi	04.12.2021

The Public Notice communicating the date of filing objection as well as the date of hearing was issued by the Commission in Dainik Bhaskar & The Tribune dated 29th December, 2021 and also hosted on the HERC website.

4 True-up Petition for the FY 2020-21

HPGCL has submitted that the petition for truing-up for the FY 2020-21 is based on the Audited Accounts for the FY 2020-21 in line with the regulation 13.1 of the MYT Regulations, 2019.

HPGCL has referred to the regulation 13.4 of the MYT Regulations, 2019, which provides 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 the subsequent control period."

HPGCL has submitted that 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 between "Recovered" as per plant availability and Actual as per audited accounts. Therefore, the True-up has been proposed on "Recovered" vis-a-vis "Actual" i.e. audited accounts for the relevant year as under:

4.1 True-up of Operation and Maintenance (O&M) expenses

The Petitioner has submitted the Commission had approved O&M Expenses of Rs. 788.79 Cr for the FY 2020-21, out of which O&M expenses amounting to Rs. 729.70 crore could only be recovered. The total actual O&M Expenses as per audited accounts for FY 2020-21 (exclusive of solar business of Rs 0.62 Cr) has been Rs. 875.01 Cr., as tabulated below: -

Particular	FY 2020-21 (Approved) 1	FY 2020-21 (Recovered) 2	FY 2020-21 (Actual) 3	True-Up 4= (3-2)
Employee Cost	591.175	545.23	637.86	92.63
Repair & Maintenance	173.133	161.93	191.88	29.95
Administrative & General	24.483	22.53	45.27	22.74
Total	788.791	729.70	875.01	145.31

The petitioner has submitted that the significant gap between the approved amount, recovered amount and actual amount on account of O&M expenses' is the increase in uncontrollable expenses towards employee cost including terminal liabilities & non-availability of RGTPS – Unit 2 since 19th September, 2020. Approved Employees Cost for FY 2020-21 was Rs. 591.175 Crore, whereas, the actual employee cost for FY 2020-21 as per audited accounts remains Rs.637.86 Crore inclusive of net Defined Benefit liability (terminal liability) of 402.08 Crore in respect of employees as per the Actuary Valuation Report submitted by the independent actuary -M/s Kapadia Global Actuaries, Mumbai. Actuary valuation is based on various factors 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 safeguard the interest of the employees of HPGCL after retirement.

That the trend of Terminal Liability of HPGCL evaluated by the independent Actuary from FY 2013-14 is as under:-

S. No.	Financial Year Amount in 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	6 2018-19 688.45			
7	2019-20	356.68		
8	2020-21	402.08		

HPGCL has further submitted that it 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. Terminal liability is an uncontrollable expenditure under Regulation 8.3(b) of MYT Regulation 2019 and the same is admissible for true-up. Accordingly, it has been requested to allow the net true up of Rs. 92.63 Cr. in respect of Employee Cost on actual basis.

Further, the O&M expenses other than employee cost, i.e. R&M and A&G expenses approved by the Commission for FY 2020-21 was Rs 173.133 Crore & Rs 24.483 Crore. However, the amount recovered by HPGCL is Rs. 161.93 Cr and 22.53 Cr, respectively, due to non-availability of RGTPP Unit-2 from September 19th, 2020 onwards. The actual R&M and A&G expense for the year remains Rs. 191.88 Cr (excluding solar business) and Rs 45.27 Cr, respectively. The increase in R&M amount is primarily attributable to the cost of R&M being carried for RGTPP-2 and also on account of reduced R&M to 50% for Unit-6, PTPS allowed by the Commission under its order dated 24.04.2020.

HPGCL has further submitted that the Commission in its order dated 18.02.2021 has identified that the donation contributed to the CM Corona Relief Fund on account of outbreak of pandemic COVID 19 Corona Relief Fund is pass through in nature. On similar lines, HPGCL has also contributed to CM Corona Relief Fund amounting to Rs 21.00 Cr which is the sole reason for increase in the A&G expenses. The same needs to be pass through in lines with the Commission's order dated 18.02.2021

The Petitioner has prayed that the Commission may allow the true up of the O&M cost amounting to Rs. 145.31 Cr. i.e. The difference between the amount recovered and actual O&M cost as per audited accounts for the FY 2020-21.

4.2 True-up of Depreciation

HPGCL has submitted that the actual depreciation of HPGCL for FY 2020-21 as per the audited accounts, exclusive of the solar business (Rs. 3.18 crore), works out as Rs 333.40 Cr. The Honourable Commission, in its orders 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 2020-21 in accordance Ind AS, is Rs. 5.76 Cr & Rs. 11.41 Cr. Thus, HPGCL in compliance with aforesaid directives, has excluded a sum up to Rs 17.17Cr. (5.76+11.41) from its true up claim of Depreciation. Accordingly, the net allowable Depreciation for FY 2020-21 exclusive

of solar business and depreciation on spares and decommissioning cost worked out as Rs. 316.23Cr (333.40-5.76-11.41). The approved depreciation for FY 2020-21 was Rs. 332.85 Cr.

The variation in the approved depreciation and net allowable depreciation for the FY 2020-21 is presented below: -

							R	ks. Crore
S. No	Unit	Approved	Actual as per audited accounts*	Dep. on GAAP Spares	Dep. on account of Ind AS	dep.	Recovered Dep.	Variance
Α	В	С	D	E	F	G=(D-E-F)	Н	I=(G-H)
1	PTPS-5-6	6.690	1.86	80.0	1.31	0.47	6.69	(6.22)
2	PTPS-7-8	58.45	57.03	0.47	5.01	51.55	58.45	(6.90)
3	DCRTPP	54.28	57.09	1.22	1.42	54.45	54.28	0.17
4	RGTPP	204.15	212.17	3.99	3.67	204.51	158.42	46.09
5	Hydel	9.28	5.25	-	-	5.25	9.00	(3.75)
	Total	332.85	333.40	5.76	11.41	316.23	286.84	29.39

^{*} Excluding Solar Business of Rs. 3.18 Cr.

In view of the above, HPGCL has prayed that the Hon'ble Commission may approve difference of Rs 29.39 Cr. as true-up of depreciation for FY 2020-21.

4.3 True-up of Interest Expenses

The Petitioner has submitted that as against the interest and finance charges on loan of Rs. 86.24 Crore approved by the Commission for the FY 2020-21, the actual amount incurred, as per the audited accounts, is Rs. 47.11 Crore (net of interest of Rs. 2.31 Crore on account of Solar Business).

HPGCL has further submitted that it had paid compensation amounting to Rs. 7.30 Cr. to the land owners of RGTPP, Hisar in compliance to order of Hon'ble Supreme Court and Rs. 0.46 Cr. to the land owners of PTPS, Panipat in compliance of Hon'ble Punjab & Haryana High Court. The entire compensation is a capital expenditure of HPGCL and has been entirely funded by the State Govt. as equity. As per Regulation 19.2 (b) of the HERC MYT Regulations 2019, the capital expenditure is to be funded in the Debt Equity ratio of 70:30. Equity in access of 30% would be treated as normative loan/ debt for the purpose of tariff determination and true-up.-Accordingly, HPGCL has considered Rs. 5.43 Cr being 70% of the capital expenditure incurred on the land compensation of Rs. 7.76Cr (7.30+0.46) as normative debt at 8.5% rate of interest (average actual rate of interest of HPGCL). The

normative interest expense so incurred stands at Rs 0.23 Cr. The same has been added to the final true-up of FY 20-21. The same was approved by the Commission earlier also, in its order dated 18.02.2021.

HPGCL has submitted that it had swapped the higher interest-bearing PFC loan of Rs 965.48 Cr. pertaining to RGTPP and PFC loan of Rs. 874.58 Cr. pertaining to DCRTPP, through SBI, during Feb., 2016 and April, 2017, respectively.

Interest and Finance charges for FY 2020-21 as per pre-restructuring Loan portfolio excluding solar business is given below: -

Pre-Restructuring Loan Portfolio & Repayments schedule for FY 2020-21 (Rs. Cr.)

Particulars	Rate of Interest	Opening Bal	Drawls during the	Repaymen ts during	Closing Balance	Interest during the
			year	the year		year
GPF Bonds	7.10%	40.69	0.00	6.78	33.91	2.41
SBI DCRTPP YNR	12.50%	512.66	0.00	120.64	392.02	56.54
REC	12.25%	501.64	0.00	75.60	426.04	56.82
State Bank of India (RGTPP)	11.45%	539.94	0.00	101.64	438.30	56.00
APDP Loan	12.50%	3.11	0.00	0.15	2.96	0.38
Punjab National Bank (Andhra Takeover)	8.65%	21.05	0.00	20.00	1.05	0.96
Punjab National Bank (Andhra Takeover Hisar)	8.65%	57.40	0.00	38.00	19.40	3.32
Punjab National Bank REC Takeover	12.25%	122.77	0.00	20.52	102.25	13.78
NABARD	5.25%	45.99	0.00	11.50	34.49	2.11*
Total		1845.25	0.00	394.83	1450.42	192.33

^{*} Total Interest during the year excluding solar business 192.33-2.11= 190.22Cr

Actual Loan Portfolio and Int. & Fin. Charges for FY 2020-21 (Rs. Cr.)

Particulars	Rate	Opening	Additions	Repayments	Closing	Interest
	of	Bal	during the	during the	Balance	during the
	Interes		year	year		year
	t (%)					
GPF Bonds	7.10	40.69	-	6.78	33.91	2.41
SBI (DCRTPP)	-	-	-	ı	0	0
REC	7.75	453.53	-	75.6	377.93	34.69
SBI(RGTPP)	-	-	-	ı	0	0
APDP Loan	12.50	3.11	-	0.15	2.96	0.39
PNB(Andhra Takeover)	8.50	22.20	-	22.20	0	0.92
PNB(Andhra Takeover, Hisar)	8.50	56.93	-	56.93	0	2.47
PNB Loan	8.50	122.77	-	122.77	0	5.95
NABARD	5.25%	45.99		11.50	34.49	2.31*
PNB (SBI takeover)		21.14	-	21.14	0	0.28
Total		766.36	0	317.07	449.22	49.42

^{*}Solar business

HPGCL has submitted that 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. Accordingly, it is proposing to claim the 50% of the savings (Rs. 118.66 Cr), as given in the table below:

Particular	Approved interest & Finance Charges	Actual interest & Finance Charges	Pre-restructuring interest & Finance Charges	Allowable interest & Finance charges	Recovere d by HPGCL	True-up
1	2	3	4	5=3+50 % (4-3)	6	7=5-6
Int.& Fin. Charges (A)	86.24	47.11	190.22	118.66	70.12	48.54
Int. On Normative Debt(B)	0	0	0	0.23		0.23
Total True up of Int.& Fin. Charges(A+B	86.24	47.11	190.22	118.89	70.12	48.77

HPGCL therefore, has requested to allow Rs 48.77 Cr. as pass through of Interest & Finance charges.

4.4 True-up of Return on Equity

HPGCL has submitted that as per regulation 20.1 of the HERC MYT Regulations 2019, the Commission may allow the RoE up to 14%. The Hon'ble Commission vide its order dated 24.04.2020, has adjudicated the issues as under:

"Note – 3: As per the MYT Regulations, 2019, RoE upto 14% can be allowed on the eligible Equity Capital in use. The Commission, taking a holistic view of the power sector in Haryana including the tariff payable by the electricity consumers had traditionally restricted the RoE to 10% in order to cushion the tariff shock to the consumers. In FY 2020-21, given the unprecedented situation emanating from the COVID-19 pandemic and the resulting restriction/lockdown ordered by Central Government/State Government, all economic activities came to a standstill. Resulting, the ability to pay of all categories of consumers has been significantly reduced. The pandemic has impacted income, earnings and employment of all categories of consumers be it domestic consumers, industrial/commercial consumers. As far as Government connections are concerned i.e. Public Water Works, Street Light, Lift

Irrigation as well as general connections in Government Offices and building, it is also a fact that due to significant reduction in revenue from direct/indirect taxes and levies, their ability to pay, has also been impaired. Hence, the Commission, after due deliberations, has considered not to allow any RoE in the FY 2020-21."

HPGCL has preferred an appeal in the Hon'ble APTEL against the issue of disallowance of RoE vides DFR no 216/2020. The same is pending for adjudication at APTEL. Keeping in view of the same, the details of opening equity, equity addition and required return of equity considered unit-wise for FY 2020-21, is summarized as under:

				Rs. Crore
Plants	Opening	Additions	Closing	RoE recovered
PTPS – 6	156.77	0.07	156.84	0
PTPS – 7	218.04	-	218.04	0
PTPS – 8	218.02	-	218.02	0
DCRTPP-1	250.765	0.40	251.165	0
DCRTPP-2	250.715	0.40	251.115	0
RGTPP-1	493.3735	1.31	494.6835	0
RGTPP-2	492.8135	0.16	492.9735	0
Hydel	18.345	0.01	18.355	0
Total	2098 8/12	2 35	2101 192	0

Αį	pproved RoE(A)	Actual RoE(B)		Recovered RoE(C)	True-up of RoE Cost(B-C)	
	0		210.00	0		**

^{* *} matter pending in Hon'ble APTEL

Hence, HPGCL has prayed that it reserves its right for reconciliation/ True-up of RoE as per the outcome of the legal recourse opted in the matter.

4.5 True-up of recovery of cost of Oil

HPGCL submitted that in FY 2020-21, it had incurred oil expense amounting to Rs. 15.27 Crore, which was considerably lower than the approved amount of Rs. 47.541 Crore. However, only an amount of Rs. 14.23 Crore could be recovered through ECR and an amount of Rs. 1.04 Crore remained unrecovered. Lower PLF and higher number of start and stop operations of the Units, led to higher oil consumption; which remains unrecovered. Hence,

In view of the above submissions, HPGCL has prayed that the Hon'ble Commission may approve true-up of Rs. 1.04 cr. on account of oil cost for FY 2020-21, as per regulation 29 of HERC MYT Regulations, 2019.

4.6 True up of interest on working capital

HPGCL submitted that the Commission in its Order dated 24.04.2020 regarding generation tariff for FY 2020-21 had projected average coal and oil prices at prevailing market prices. Accordingly, interest on working capital amounting to Rs. 109.668 crore was allowed. However, there has been variation in prices of coal and oil during the FY 2020-21. Therefore, while computing the truing-up of working capital FY 2020-21, actual rate of coal prevailing in FY 2020-21 has been considered.

Due to variation in Fuel prices, the interest on normative working capital requirement for FY 2020-21, as per the approved norms of the HERC, has decreased to Rs 106.03 Cr against the approved interest on working capital of Rs 109.668Cr.

HERC has approved the Interest on Working Capital @ 8.65% (7.40%+1.25%). However, due to change in interest rate, the allowable IWC as per Regulation 22.2 of MYT 2019 has been reduced to 8.60% which is liable to be pass through under the True-up.

The table below summarizes True-up of interest on working capital for FY 2020-21.

Particular	Approved IWC (Rs. Cr.) @ 8.65% (A)	Normative IWC (Rs. Cr.) @ 8.60% (B)	Actual IWC (C)	Recovered IWC (D)	True-up Rs. Cr. E=C-D
Interest on working capital	109.668	106.03	115.45	97.70	17.75

HPGCL has requested to be allowed to recover, as true-up, the difference of Rs 17.75 Cr. as true-up of interest on working capital for FY 2020-21.

4.7 Non-Tariff Income

Detail of Other Non-operating income included in the other income as per the Audited Balance Sheet for the FY 2020-21 is as under:

Non-operating income for FY 2020-21 (Rs. Cr.)

· · · · · · · · · · · · · · · · · · ·	/
Particulars	Amount (Rs. in crore)
Income from sale of scrap	3.78
50% of other income	1.61
Total	5.39

4.8 Total True-up for the FY 2020-21

A summary of the True-up claims as proposed by the HPGCL is presented in the table below: -

(Rs. Crore)

O&M	Depreciation	Oil	IWC	Interest	RoE	Non-Tariff	Total
Expenses		Expense		& Fin.		Income	True-up
				Charges			(Cr.)
243.10	6.26	(37.60)	25.68	6.895	17.32	6.645	261.655

In addition to the above claim, the petitioner has prayed that the Commission may also allow carrying cost on the trued-up amount as per MYT Regulations along with late payment surcharge, if any delay in realization of payments beyond the stipulated time from the DISCOMs in accordance with regulation 43 of the HERC MYT Regulation 2019.

5 Review of Capital Investment Plan

5.1 The Commission vide its Order dated 18.02.2021 has disposed of HPGCL petition PRO 76 of 2020 with the directives regarding financial progress of Capex approved by the Commission including work wise deviation, if any, from the same. Accordingly, the approved Capital Investment Plan of HPGCL was as under:

S	Capital Expenditure Work	(Rs. Cr.)				
No	Year	2020-21	2021-22	2022-23	2023-24	2024-25
1	Capital Overhauling at WYC	3.5		-	-	-
2	ERP System and allied works		31.26	-	-	-
3	Data Centre, Data Recovery centre etc. for ERP Solution	-	13.38	-	-	-
4	Balance Payment to R-Infra against EPC contract for RGTPP, Hisar	-	9.43	-	-	-
5	Procurement of PA fan blades for RGTPP Hisar	0.42	-	-	-	
6	Procurement of 2 No. Air Driers for Transport Compressors for RGTPP Hisar	-	-	0.75	-	-
7	Construction of 2 no. Barracks for CISF for RGTPP Hisar	1.28	-	-	-	-
8	Installation of CCTV surveillance System in RGTPP Hisar	-	2.78	-	-	-
9	Construction of DAV school in power plant colony for RGTPS Hisar	-	-	6.87	-	-
10	Revival of 02 Nos of ESP fields of RGTPP Unit I	6.17	-	-	-	-
11	Improvement work of Cooling Towers of RGTPP Unit I & II	6.00	-	-	-	-
12	Installation of Variable Frequency Drive in Condensate Extraction Pump (CEP) of RGTPP Unit I & II	-	5.21	-	-	-
13	Replacement of 2 Nos. Stator of BCP of RGTPP Unit I & II	-	3.16	-	-	-
14	Up gradation of C&I system for RGTPP Hisar	3.00	-	8.0	-	-
15	Procurement of ID fan blades, RGTPP	-	1.68	-	-	
16	Replacement of 03 Nos. Fire Tenders at RGTPP	-	-	1.20	-	-

Capital Expenditure Work	(Rs. Cr.)					
Year	2020-21	2021-22	2022-23	2023-24	2024-25	
Up gradation of hardware and software of PLC at RGTPP, Khedar, Hisar	-	-	-	-	7.00	
Replacement of 2 Nos. (one for each unit) Battery Banks for main plant 2x150 kVA UPS System for Unit 1 &2, RGTPP, Khedar, Hisar	0.60	-	-	-	-	
Procurement of Complete Battery Banks Lead Acid Plante 220V, 2140AH in each Unit (Unit 1&2), RGTPP, Khedar, Hisar	1.90	1.9	-	-	-	
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	-	
Construction of First Aid Centre and additional RCC Roof slab of DG Set house at RGTPP, Khedar, Hisar	-	0.55	-	-	-	
Purchase of Ion Chromatography system fully automatic PC based, RGTPP Hisar	-	0.65	-	-	-	
Revival of Fire Fighting System of Unit6, PTPS, Panipat	-	-	0.6	-	-	
Replacement of damaged floor and Construction of Roads in PTPS Colony, Panipat as per new norms of Government of Haryana	-	1.55	-	-	-	
Up-gradation of PTPS Unit-6 HMI System of pro- control supplied by M/s BHEL		-	1.5	-	-	
Energy Management System PTPS Unit- 7-8	-	-	0.7	-	-	
Modernization of Boiler Lift for PTPS Unit 8	-	-	0.55	-	-	
Replacement of 02 Nos. Fire Tenders at PTPS Panipat	0.4	0.4	<u> </u>	-	-	
Renovation of centralised AC System of Unit-7&8, PTPS Panipat	-	-	1.8	-	-	
Providing rejected Coal (Pucca Floor under 132 KV & 220 KV Lines inside the plant boundary) PTPS, Panipat	0.5	-	-	-		
Construction of all-weather patrolling track along the peripheral boundary wall at PTPS, Panipat	0.5	-	-	-		
Replacement of 8" water lines around the circular road in PTPS, Colony	0.5	-	-	-	-	
Replacement of PTPS Unit-6 AD Line in Ash Handling & repair D2 of ESP Field	0.50					
Up gradation of existing DCS system for DCRTPP 1 & 2	4	-	-	-	-	
Township for DCRTPP, Yamunanagar	-	2.36	-	-	-	
Providing of 2 No. VFD on Unit-II DCRTPP ,6.6KV Motor of CEP	-	2.36	-		-	
Up-gradation of existing PLC & SCADA at DCRTPP	-	2.25	-	-	-	
Refurbishment of BFP Cartridge: DCRTPP, Yamuna Nagar		1.6	-	-	-	
Purchase of 01 no. Runner Hub without blades and new set of guide vanes	-	-	7	-	-	
Total	29.27	80.52	28.97	1.01	7.00	
Grand Total FY 2020-21 to FY 2024-25		<u> </u>	146.77			
	Year Up gradation of hardware and software of PLC at RGTPP, Khedar, Hisar Replacement of 2 Nos. (one for each unit) Battery Banks for main plant 2x150 kVA UPS System for Unit 1.8.2, RGTPP, Khedar, Hisar Procurement of Complete Battery Banks Lead Acid Plante 220V, 2140AH in each Unit (Unit 18.2), RGTPP, Khedar, Hisar 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 Construction of First Aid Centre and additional RCC Roof slab of DG Set house at RGTPP, Khedar, Hisar Purchase of Ion Chromatography system fully automatic PC based, RGTPP Hisar Revival of Fire Fighting System of Unit6, PTPS, Panipat Replacement of damaged floor and Construction of Roads in PTPS Colony, Panipat as per new norms of Government of Haryana Up-gradation of PTPS Unit-6 HMI System of procontrol supplied by M/s BHEL Energy Management System PTPS Unit 7-8 Modernization of Boiler Lift for PTPS Unit 8 Replacement of 02 Nos. Fire Tenders at PTPS Panipat Renovation of centralised AC System of Unit-7&8, PTPS Panipat Providing rejected Coal (Pucca Floor under 132 KV & 220 KV Lines inside the plant boundary) PTPS, Panipat Replacement of 8" water lines around the circular road in PTPS, Colony Replacement of PTPS Unit-6 AD Line in Ash Handling & repair D2 of ESP Field Up gradation of existing DCS system for DCRTPP 1 & 2 Township for DCRTPP, Yamunanagar Providing of 2 No. VFD on Unit-II DCRTPP, 6.6KV Motor of CEP Up-gradation of existing PLC & SCADA at DCRTPP Refurbishment of BFP Cartridge: DCRTPP, Yamuna Nagar Purchase of 01 no. Runner Hub without blades and new set of guide vanes Total	Vear Up gradation of hardware and software of PLC at RGTPP, Khedar, Hisar Replacement of 2 Nos. 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Fire Tenders at PTPS Panipat Renovation of centralised AC System of Unit-7-88, PTPS Panipat PTPS Panipat Construction of all-weather patrolling track along the peripheral boundary wall at PTPS, Panipat Replacement of St water lines around the circular road in PTPS, Colony Replacement of St water lines around the circular road in PTPS, Value and the plant boundary) PTPS, Panipat Replacement of St water lines around the circular road in PTPS, Colony Replacement of St water lines around the circular road in PTPS, Colony Replacement of St water lines around the circular road in PTPS, Colony Replacement of St water lines around the circular road in PTPS, Value and the circular road in PTPS, Colony Replacement of St water lines around the circular road in PTPS, Colony Replacement of St water lines around the circular road in PTPS, Colony Replacement of St water lines around the circular road in PTPS, Colony Replacement of St water lines around the circular road in PTPS	

5.2 That there are certain variations in the actual CAPEX incurred vis-à-vis approved expenditure mainly due to revision in the overhauling schedule/ financial prudence and some of the schemes have been completed/surrendered in the FY 2020-21.

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

Sr No	lo 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		
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	
17	Construction of First Aid Centre and additional RCC Roof slab of DG Set house at RGTPP, Khedar, Hisar	0.55			
18	Purchase of Ion Chromatography system fully automatic PC based, RGTPP Hisar	0.65			
19	Revival of Fire Fighting System of Unit6, PTPS, Panipat			0.60	
20	Replacement of damaged floor and Construction of Roads in PTPS Colony, Panipat as per new norms of Government of Haryana			1.55	
21	Up-gradation of PTPS Unit-6 HMI System of pro-control supplied by M/s BHEL			1.50	
22	Energy Management System PTPS Unit- 7-8		0.70		
23	Modernization of Boiler Lift for PTPS Unit 8		0.7		

24	Replacement of 02 Nos. Fire Tenders at PTPS			0.44	
	Panipat				
25	Renovation of centralized AC System of Unit-7&8, PTPS		1.80		
	Panipat				
26	Providing rejected Coal (Pucca Floor under 132 KV & 220 KV Lines inside the plant boundary) PTPS,Panipat	0.38			
27	7 Construction of all-weather patrolling track along the peripheral boundary wall at PTPS, Panipat				
28	Replacement of 8" water lines around the circular road in PTPS, Colony	0.50			
29	Township for DCRTPP, Yamunanagar		0.35	2.01	
30	Up-gradation of existing PLC & SCADA at DCRTPP		2.5488		
31	Refurbishment of BFP Cartridge: DCRTPP, YamunaNagar	1.55			
32	Purchase of 01 no. Runner Hub without blades and new set of guide vanes-WYC		7		
	TOTAL	26.16	77.19	11.54	11.87
	GRAND TOTAL	126.76			

Notes:

- 1. The scheme listed at S.No 5, 01 No of barrack has been completed and the same is sufficient for handling the work.
- 2. The scheme listed at S.No 6, the work is under progress and as per the work order the same has been revised downward from 2.78 Cr to 2.44 Cr.
- 3. The scheme at S.No 14, the amount of work is including the buyback of old batteries, thus the awarded cost considering the buyback has been reduced from 0.60 Cr to 0.41 Cr.
- 4. The scheme listed at S. No 26 & 27, the actual cost Rs. 0.76 crore will be incurred as approval and the same has been 1 Cr approved vs 0.76 Cr as per actual.

Completed/Dropped Schemes

Sr. No.	Capital Expenditure Work	Amount	Remarks
1	Procurement of PA fan blades for RGTPP Hisar	0.42	Completed
2	Procurement of 2 No. Air Driers for Transport Compressors for RGTPP Hisar	0.75	Dropped
3	Revival of 02 Nos of ESP fields of RGTPP Unit I	6.17	Completed
4	Installation of Variable Frequency Drive in Condensate Extraction Pump		
	(CEP) of RGTPP Unit I& II	5.21	Dropped
5	Replacement of PTPS Unit-6 AD Line in Ash Handling & repair D2 of ESP Field	0.35	Completed
6	Up gradation of existing DCS system for DCRTPP 1 & 2	0.35	Completed
7	Providing of 2 No. VFD on Unit-II DCRTPP ,6.6KV Motor of CEP	2.00	Dropped

Note:

CAPEX in respect of New Environmental Norms: The CAPEX in respect of implementation of the stringent New Environmental norms is yet to be finalised after selecting the best suitable option. HPGCL has already initiated the process for finalising the same after in principle approval accorded by the Commission. HPGCL will approach the Hon'ble Commission with its actual expenditure after completion/COD of the CAPEX in respect of the New Environmental Norms for approval.

The indicative values exclusive of IDC & IEDC in respect of the New Environmental Norms CAPEX is as under:

Indicative CAPEX for New Environmental Norms (Cr.)

Sr. No.	Capital Expenditure Work	2021-22	2022-23	2023-24	2024-25	Total
1	Installation of FGD RGTPP	66.55	399.31	133.11	66.55	665.52
2	Installation of FGD DCRTPP	55.14	330.86	110.29	55.14	551.44
3	Installation of FGD PTPS 6	6.04	34.23	-	-	40.27
4	Installation of FGD PTPS 7-8	13.55	60.79	-	-	74.34
5	Installation of Low NOx Burner &SOFA RGTPP	7.28	65.48	-	-	72.75
6	Installation of Low NOx Burner &SOFA DCRTPP					
7	Installation of Low NOx Burner & SOFA PTPS 7-8					

HPGCL has requested to approve the revised capitalization of schemes as per the details provided above.

6 HPGCL's Proposed Technical Parameters

6.1 NAPAF (Normative Annual Plant Load Factor)

The petitioner has proposed Unit wise NAPAF for the FY 2021-22 in line with the order dated 18.02.2021 and FY 2022-23 in line with HERC MYT Regulation, 2019 as under:

NAPAF for FY 2020-21 and FY 2021-22

S. N	Unit #	Approved	Proposed		
		FY 21-22	FY-21-22	FY 22-23	
1	PTPS 6	35.00%	35.00%	85.00%	
2	PTPS 7	53.00%	53.00%	85.00%	
3	PTPS 8	53.00%	53.00%	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	56.00%	56.00%	43.00%	

6.2 Auxiliary Energy Consumption

HPGCL has proposed auxiliary consumption for the FY 2022-23 in line with the MYT Regulations 2019 with relaxations and for the FY 2021-22 in line with the approval already granted vide order dated 18.02.2021

The auxiliary consumption approved by the Hon'ble Commission for the FY 2021-22 and HPGCL proposed by FY 2021-22 and FY 2022-23, are as under: -

S. N	Unit #	Approved		Proposed
		FY21- 22	FY21- 22	FY 22-23
1	PTPS 6	9.00%	9.00%	10.00%
2	PTPS 7	8.50%	8.50%	9.30%
3	PTPS 8	8.50%	8.50%	9.30%
4	DCRTPS 1	8.50%	8.50%	8.50%
5	DCRTPS 2	8.50%	8.50%	8.50%
6	RGTPS 1	6.00%	6.00%	6.00%
7	RGTPS 2	6.00%	6.00%	6.00%
8	WYC HEP	1.00%	1.00%	1.00%

HPGCL has submitted that PTPS Unit- 5 & 6 were envisaged together and thus sharing some common auxiliaries. After the decommissioning of Unit-5, the common auxiliaries are needed to be on bar for readiness of Unit 6. Thus, leads to higher auxiliary consumption for Unit 6. The Hon'ble Commission is requested to take the note of the above and allow the auxiliary @ 10% for PTPS Unit-6.

6.3 Secondary Fuel Oil Consumption (SFC)

Secondary fuel consumption proposed by HPGCL in line with the HERC MYT Regulations is as tabulated below: -

SFC (ml/kWh) as proposed by HPGCL for FY 2021-22 and FY 2022-23

S.N	Unit #	Approved	Proposed		
		FY21- 22	FY21- 22	FY 22-23	
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	DCRTPS 1	0.50	0.50	0.50	
5	DCRTPS 2	0.50	0.50	0.50	
6	RGTPS 1	0.50	0.50	0.50	
7	RGTPS 2	0.50	0.50	0.50	

HPGCL has further submitted that 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 and stop operations, the norms provided as per regulation for specific oil consumption is on lower side at current PLF/ loading of Units. HPGCL has submitted that it reserves its right to claim the deficit in respect of the Oil consumption at the time of true-up of FY 2021-22 as per Regulation 29 of MYT Regulation, 2019.

6.4 Station Heat Rate (SHR)

The SHR for the FY 2022-23 is proposed by HPGCL as per norms specified in HERC MYT Regulation, 2019 is as under: -

S.N	SHR (kcal/kWh)	Approved	Proposed	
		FY 21-22	FY 21-22	FY 22-23
1	PTPS 6	2550	2550	2550
2	PTPS 7	2500	2500	2500
3	PTPS 8	2500	2500	2500
4	DCRTPS 1	2344	2344	2344
5	DCRTPS 2	2344	2344	2344
6	RGTPS 1	2387	2387	2387
7	RGTPS 2	2387	2387	2387

6.5 Gross Calorific Value (GCV) and Price of Coal

HPGCL has proposed GCV, cost of coal and Secondary Fuel (Oil) for the FY 2022-23 as per the actual weighted average calorific value of coal/Oil for PTPS, DCRTPS and RGTPS during April to September of the FY 2021-22, as under: -

GCV & Coal Cost (FY 2022-23)

Particulars	PTPS	DCRTPS	RGTPS
Gross Calorific Value of Coal (kcal/Kg)	3439	3207	3368
Average landed cost of coal (Rs. /MT)	4570	4448	4797

GCV & Oil Cost (FY 2022-23)

Particulars	PTPS	DCRTPS	RGTPS
Gross Calorific Value of Oil (kcal/Kg)	9540	8994	9408
Average landed cost of Oil (Rs. /KI)	54451	51671	55456

6.6 Energy Charges (ECR)

HPGCL has computed ECR as per Regulation 31 of the MYT Regulations, 2019, as tabulated below: -

HPGCL'S Computation of ECR (FY 2022-23)

Fuel Cost	Generation (Ex-bus)	Per Unit Variable cost
	in MU	Rs/ Unit
PTPS – 6	1407.29	3.812
PTPS – 7	1688.38	3.686
PTPS – 8	1688.38	3.686
DCRTPS 1	2043.93	3.574
DCRTPS 2	2043.93	3.574
RGTPS-1	4199.54	3.639
RGTPS-2	4199.54	3.639

7 Annual Fixed Cost

The petitioner has proposed fixed cost for the FY 2022-23 in line with HERC MYT

Regulations, 2019 read with submissions made in the present petition.

7.1 Operation and Maintenance Expenses (O&M)

It has been submitted that the petitioner / HPGCL has opted for statutory appeal in the Hon'ble APTEL against this Hon'ble Commission's order dated 24.04.2020 and 18.02.2021 for reduction of Employees Cost from the base year. HPGCL is now claiming the Employees Cost as per Regulation; however, it reserves its right to revise the same as per the outcome of the appeal filed in Hon'ble APTEL, if required.

In view of the above submissions, HPGCL has proposed O&M expense for the FY 2022-23 as per the methodology adopted by the Commission in HERC MYT Regulation, 2019 as follows: -

Sr. No.	Unit	Approved FY 21-22	Proposed FY 22- 23
1	PTPS -6 *	86.88 *	120.47
2	PTPS –7	88.873	133.64
3	PTPS –8	88.873	133.64
4	DCRTPS 1	111.566	144.64
5	DCRTPS -2	111.566	144.64
6	RGTPS 1	135.123	184.76
7	RGTPS 2	135.123	184.76
8	WYC Hydel	27.535	43.21
9	Total	785.538	1089.76

^{*} O&M expenses for PTPS-Unit 6 has been claimed, as approved for the FY 2020-21, as per the interim stay granted by the APTEL. O&M expenses for the FY 2022-23 has been claimed as per norms specified in the HERC MYT Regulations, 2019.

7.2 Depreciation

HPGCL has submitted that the depreciation has been considered only for the Capex schemes that has been completed during the year as per the HERC Regulation. The depreciation claim is within the maximum allowable limit. Opening Gross Fixed Assets (GFA) for the FY 2021-22 is as per the Fixed Asset Register (FAR) of FY 2020-21 and closing GFA for FY 2022-23 is after considering the addition of the Capex scheme completed in the respective years is tabulated below: -

Gross Fixed Assets for FY 2022-23 (Rs. Crore)

S.N	Unit #	GFA as on 01.04.20	Addition FY 2020-21	Addition FY 2021-22	Addition FY 2022-23	GFA as on 31.03.2023
1	PTPS – 6	996.82	0.00	-	-	996.82
2	PTPS – 7	945.18	0.34	0.85	8.74	955.10
3	PTPS – 8	954.99	0.22	0.85	9.44	965.48

	Total	9746.52	14.13	26.16	77.19	9863.99
8	Hydel	208.16	0.14	3.50	7.00	218.79
7	RGTPP-2	2,173.75	0.96	9.71	17.07	2,201.48
6	RGTPP-1	2,181.22	8.33	9.71	17.07	2,216.32
5	DCRTPP-2	1,141.89	2.07	0.78	8.94	1,153.68
4	DCRTPP-1	1,144.53	2.08	0.78	8.94	1,156.32

HPGCL has further submitted that the Commission in its earlier order has disallowed certain capitalisation. Accordingly, allowance GFA has been computed, as per details given below: -

Unit	GFA as on 01.04.2021 - exclusive of Ind AS	Disallowance s – GAAP spares	Allowable GFA as on 01.04.2021	Addition during 2021-22	Allowable GFA as on 01.04.2022	Addition during 2022-23	Allowable GFA as on 01.04.2023
PTPS – 6	996.82	1.07	995.75	-	995.75	-	995.75
PTPS – 7	945.52	2.35	943.17	0.85	944.02	8.74	952.76
PTPS -8	955.20	5.53	949.67	0.85	950.52	9.44	959.95
DCRTP-1	1,146.61	13.65	1,132.96	0.78	1,133.74	8.94	1,142.67
DCRTP-2	1,143.96	13.65	1,130.32	0.78	1,131.09	8.94	1,140.03
RGTPP-1	2,189.54	37.76	2,151.78	9.71	2,161.49	17.07	2,178.56
RGTPP-2	2,174.70	37.76	2,136.94	9.71	2,146.65	17.07	2,163.72
Hydel	208.29		208.29	3.50	211.79	7.00	218.79
Total	9760.64	111.76	9648.89	26.16	9,675.05	77.19	9752.24

The depreciation rate has been applied on the average of opening and closing asset at the rate notified in HERC, MYT Regulations, 2019. HPGCL has further submitted that the 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). Thus, HPGCL in compliance with aforesaid directives has excluded such depreciation is as under: -

Allowable GFA for FY 2022-23

S.No.	Unit	Net allowable depreciation
1	PTPS - 6	0.46
2	PTPS - 7	26.50
3	PTPS - 8	27.45
4	DCRTPP-1	27.90
5	DCRTPP-2	28.23
6	RGTPP-1	103.35
7	RGTPP-2	103.19
8	Hydel	7.74
	Total	324.82

It has been further submitted that the Commission in its Order dated 31.10.2018 had directed HPGCL to maintain a memorandum accounts of allowed capitalization, spares and decommissioning cost capitalized, depreciation and net block of fixed assets. HPGCL has maintained the memorandum accounts as directed by the Commission.

7.3 Interest & Finance Charges

HPGCL has submitted that the 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.

It has been submitted that HPGCL is expecting to incur interest and finance charges amounting to Rs 30.52 Cr. in FY 2022-23 while the pre-restructuring interest and finance charges for FY 2022-23 are Rs 116.50 Cr.

Therefore, there will be expected saving of Rs 85.98 Cr (Rs 116.50- 30.52 Cr.) in the interest and finance charges due to diligence and efficient financial management of HPGCL. 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 loan. Accordingly, HPGCL requests the Commission to approve interest expenses including incentive (50% of savings from restructuring) for FY 2022-23.

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 2022-23.

The interest and finance charges so computed based on the above submissions are presented below:

Interest and finance charges (Rs. Cr.) for FY 2022-23

	Int. & Fin. Charges post restructuring	Int. & Fin. Charges pre- restructuring	Savings due to restructu ring	Incentive (50% of savings)	Total interest expense	Interest expense on normative loan	Final Interest Expense
1	2	3	4= (3-2)	5=50% of	6= (2+5)	7	8=6+7
				4			
PTPS 7	0.92	0.99	0.07	0.03	0.96	0.01	0.96
PTPS 8	0.94	1.01	0.07	0.03	0.97	0.01	0.98
DCRTPP-							
1	0.97	14.19	13.22	6.61	7.58	0.00	7.58

	Int. & Fin. Charges post restructuring	Int. & Fin. Charges pre- restructuring	Savings due to restructu ring	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= (2+5)	7	8=6+7
DCRTPP-							
2	0.97	14.19	13.22	6.61	7.58	0.00	7.58
RGTPP-1	12.95	42.64	29.70	14.85	27.79	0.11	27.90
RGTPP-2	12.95	42.64	29.70	14.85	27.79	0.11	27.90
WYC							
Hydel	0.84	0.84	0.00	0.00	0.84	0.00	0.84
Total	30.52	116.50	85.98	42.99	73.51	0.23	73.74

7.4 Return on Equity (RoE)

HPGCL submitted that the Commission in its Order dated 18.02.2021 has approved the RoE at 10%. However, the Regulation 20 of HERC MYT Regulations, 2019 specifies the Return on Equity capital at a ceiling of 14% per annum on the opening equity base of the particular year and also on 50% of allowable capital cost for the assets put to use during the year. Accordingly, HPGCL has considered Return on Equity at 14%, in line with the MYT Regulations, 2019. Accordingly, the equity employed and RoE for FY 2022-23 is as under:

Details of Equity Deployed in FY 2022-23 (Rs Cr.)

	Details of Equity Deployed in 1 1 2022-25 (RS C1.)							
Sr.	Unit#	Closing FY	Additions FY	Additions FY	Closing FY	Proposed		
No.		2020-21	2021-22	2022-23	2022-23	RoE@ 14%		
1	PTPS – 6	156.84	-		156.84	21.96		
2	PTPS – 7	218.04	0.17	1.75	219.96	30.67		
3	PTPS – 8	218.02	0.17	1.89	220.08	30.68		
4	DCRTPS-1	251.16	0.16	1.79	253.10	35.31		
5	DCRTPS-2	251.11	0.16	1.79	253.05	35.30		
6	RGTPS-1	494.69	1.94	3.41	500.04	69.77		
7	RGTPS-2	492.97	1.94	3.41	498.33	69.53		
8	Hydel	18.36	0.70	1.40	20.46	2.77		
	Total	2101.19	5.23	15.44	2121.86	295.98		

7.5 Interest on Working Capital (IWC)

HPGCL has submitted that Regulation 22.1 of HERC MYT Regulations, 2019 lists the components of working capital to be considered for estimating tariff. Further, the Regulation 22.2 of the aforementioned Regulations state 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. SBI MCLR as on 1st April 2021 was 7% p.a. Accordingly, HPGCL has estimated the working capital requirements and the interest on working capital @ 8.50% (7.00%+1.50%).

HPGCL is presently proposing the IWC as per MYT, Regulations for FY 2022-23 is as under: -

IWC (Normative) for FY 2022-23 (Rs Cr.)

Unit #	Coal Stock	Oil Stock	O&M Expenses	Maint. Spares	Receivables	Total W/C Requirement	Int. on W/C
	1 Month	1Month	1Month	10% Thermal/7.5% (Hydel)	1 Months		@ 8.50%
PTPS – 6	43.99	0.71	9.71	11.65	57.15	123.20	10.47
PTPS – 7	51.44	0.42	10.71	12.85	68.43	143.85	12.23
PTPS – 8	51.44	0.42	10.71	12.85	68.51	143.93	12.23
DCRTPP-1	60.40	0.52	11.49	13.79	79.44	165.63	14.08
DCRTPP-2	60.40	0.52	11.49	13.79	79.46	165.66	14.08
RGTPP-1	126.32	0.96	13.92	16.70	160.28	318.18	27.04
RGTPP-2	126.32	0.96	13.92	16.70	160.24	318.14	27.04
Hydel			3.61	3.25	4.64	11.50	0.98
Total	520.31	4.51	85.54	101.56	678.15	1390.09	118.16

7.6 Total Fixed Cost

HPGCL proposed Fixed Cost of HPGCL Plants proposed for FY 2022-23 is as under:

Annual Fixed Cost (Rs. Cr.) for FY 2022-23

S.N	Unit #	O&M	Depreciation	Interest &	Return on	W/C	Total Fixed
				Finance	Equity	Interest	Cost
				Charges			
1	PTPS - 6	116.47	0.46	-	21.96	10.472	149.36
2	PTPS - 7	128.50	26.5	0.96	30.67	12.227	198.86
3	PTPS - 8	128.50	27.45	0.98	30.68	12.234	199.84
4	DCRTPP-1	137.85	27.9	7.58	35.31	14.078	222.72
5	DCRTPP-2	137.85	28.23	7.58	35.3	14.080	223.04
6	RGTPP-1	166.98	103.35	27.9	69.77	27.045	395.04
7	RGTPP-2	166.98	103.19	27.9	69.53	27.042	394.64
8	Hydel	43.35	7.74	0.84	2.77	0.978	55.68
	Total	1026.476	324.82	73.74	295.99	118.16	1839.18

- 7.7 HPGCL has further requested to 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.
- **7.8** HPGCL has further requested to allow plant wise recovery of Fixed Cost and not Unit-wise recovery.

7.9 Summary of Tariff computation for the FY 2022-23

Based on the above submissions the proposed tariff i.e. Total Capacity Charges and Energy Charge Rate (ECR) per kWh for FY 2022-23 is summarized as under:

Tariff Summary for FY 2021-22

Particular	PTPS 6	PTPS 7	PTPS 8	DCRTS 1	DCRTS 2	RGTPS 1	RGTPS 2	WYC	Total
								HEP	
Total Capacity Charges (Rs crore)	149.36	198.86	199.84	222.72	223.04	395.04	394.64	55.68	1839.18
Energy Charge Rate (Rs/kWh)	3.812	3.686	3.686	3.574	3.574	3.639	3.639	-	

7.10 HPGCL's has Prayed as under: -

- a) Admit this Petition.
- b) To direct DISCOMs to give minimum scheduling of quantum of power to HPGCL, as envisaged while deciding the APPC.
- c) To direct DISCOMs to exhaust all the concluded contracts before resorting to Short Term purchase by considering all aspects.
- d) To allow the recovery of fixed cost on plant basis by exercising Regulation 78 &79 of the MYT, 2019, as all the regulations envisage metering on plant basis at outgoing feeder only.
- e) To relax the norms for Auxiliary Power Consumption for PTPS on account of Tube Mills at par with CERC Norms by exercising the regulation 78 & 79 of MYT Regulation 2019.
- f) To grant in-principle approval for increase in stock of Fuel to 60 days to meet the demand of Peak season by exercising the regulation 78 & 79 of MYT, Regulation, 2019 with the liberty to seek any increase in IWC at the time of true-up.
- g) To consider MoEFCC notification as 'Change in law' and allow recovery of the expenditure incurred on account of transportation of Fly Ash under True-up on yearly basis.
- h) Approve revised schedule of capital expenditure plan as submitted.
- i) Approve True-up of Rs 236.87 Cr. for FY 2020-21, after considering the Non-Tariff Income as proposed as per audited financial statements with appropriate holding cost.
- j) Allow WYC PLF @ 43% on the basis of past trend of the generation and water flow data.
- k) Allow the normative parameters for PTPS for FY 2022-23 as per MYT, 2019.

- 1) Allow the Normative fixed cost and Normative ECR for FY 2022-23.
- m) 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.
- n) 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.
- o) Treat the filing as complete in view of substantial compliance as also the specific requests for waivers with justification placed on record.

8 Additional Submissions : Operation constraints.

HPGCL has additionally sought directions of the Commission on the following points:-

8.1 HPGCL Scheduling:

That the necessary directions may be imparted to DISCOMs to treat HPGCL plants as 'base load plants' and first priority of scheduling may be granted to HPGCL. Any shortfall may be requisitioned from other sources.

Commission's View: The scheduling of power plants, except those falling under 'must run' category, has to necessarily be in terms of merit order stack. Hence, HPGCL's power plants, especially the Units located at Panipat (6,7 and 8) can be scheduled by the Distribution Licensees, in case the marginal cost of power from other long – term sources exceed the fuel / variable cost of PTPS Units i.e. 6, 7 and 8.

8.2 PTPS, Panipat Unit -6 Scheduling:

That the Commission in its order dated 18.02.2021 has not determined the tariff of Unit-6, PTPS. The APTEL vide its order dated 24.09.2021 (APL 150/2021) has

stayed the said part of the order and also allowed to recover the fixed cost as prayed in the stay application.

HPGCL has offered the power from PTPS -Unit 6 at price of Rs. 3.675/kWh. Whereas, HPPC has bought short term power from power exchange at a rate as high as Rs. 12/kWh.

DISCOMs may be directed to exhaust all concluded contracts before proceeding for any short-term power purchase.

Commission's View: The cost of short-term or day ahead power may not be an appropriate benchmark for cost comparison. The Commission is aware of the Hon'ble APTEL's judgement referred to above. It needs to be noted that prior to the FY 2021-22 also, when the Commission did not determine tariff for the PTPS – 6 as the station was not scheduled at all i.e. in the FY 2019-20 and FY 2020-21 the PLF was zero. Hence, in the present order, the Commission is determining tariff for PTPS Unit – 6 as the Hon'ble APTEL has ordered payment of fixed charge for this Station. However, as observed earlier, scheduling from Unit – 6, shall be subject to marginal cost justification only, as mentioned above in Para 8.1.

8.3 Deviation Settlement Mechanism (DSM):

That Unit-wise DSM cannot be implemented, due to difficulty in bifurcation of auxiliary consumption by common auxiliaries and possibility of metering only at the outgoing feeder. Meters at GT-1, GT-2, ST-1 and ST-2 can be replaced with ABT meters but in the existing infrastructure, it is not possible to have a dedicated PT for each generating unit and station transformer. Therefore, DSM and plant-based tariff recovery should be allowed (instead of unit-wise recovery) by exercising the power to relax and power to remove difficulties provided under Regulation 78 & 79 of MYT Regulations.

Commission's View:

The Commission observes that the issue has already been decided in its earlier order dated 18.02.2021. The relevant part of the Order dated 18.02.2021 (HERC/PRO-76 of 2020), is reproduced as under:-

"The issue raised regarding implementation of DSM has been considered. The Commission is of the view that the tariff determined by the Commission is Unit Wise and not power plant wise i.e. PTPS Units 6 to 8, are considered as separate Units. Hence, DSM ought to be applicable Units wise as such. The issue of ABT Meters can be sorted out mutually between the STU and HPGCL. Hence, the Commission is not inclined to relax the relevant Regulations as prayed for." (page 101 of the order dated 18.02.2021).

Hence, the issue raised by HPGCL has already been decided by the Commission, in terms of the order reproduced above and subsequent to that there are no change or circumstances caused by change in law, judgement of Hon'ble Supreme Court or Hon'ble APTEL which may warrant the Commission to reconsider its decision. Accordingly, at this stage, nothing survives for consideration of the Commission.

8.4 Auxiliary consumption of Panipat units:

That auxiliary consumption norms for PTPS units, where tube mills are used, may be increased by 0.8%, by exercising the power to relax and power to remove difficulties provided under Regulation 78 & 79 of MYT Regulations at par with CERC Tariff Regulations, 2019. Accordingly, HPGCL has claimed auxiliary consumption of PTPS Unit 6 at 10% (norms: 9%), and PTPS Unit 7 & 8 at 9.30% (norms 8.50%).

Commission's View: At this stage i.e. while undertaking true up exercise and tariff determination, the Commission is inclined and bound by its own regulations. Hence, at this stage, and more so, as PTPS Units are only intermittently scheduled, the Commission is not convinced that the norms should be relaxed or any difficulty, where there is none, needs to be removed.

8.5 Permission to increase stock of fuel from 30 days to 60 days for peak season:

That HPGCL may be allowed permission to increase stock of fuel from 30 days to 60 days for peak season, by exercising the power to relax and power to remove difficulties provided under Regulation 78 & 79 of MYT Regulations. Interest on working capital may be allowed as per norms of stock holding of 30 days. However, the same be consolidated at the time of true up, in relaxation of the Regulations.

Commission's View: The Commission has considered the submissions and observes that while the petitioner is, on one hand, praying for being allowed to increase the coal stock while on the other hand referring to low scheduling leading to coal stock pile and its consequences thereof. Hence, the petitioner is taking a contradictory stand on the same issue. The Commission, had earlier, advised HPGCL to rationalize coal linkages vis-à-vis minimum offtake under the Fuel Supply Agreement (FSA) keeping in view the past trend in scheduling of various powerhouses. However, HPGCL tried to justify coal linkages based on normative generation and hence did not take a reasoned decision in the matter after thorough analysis of the ground realities and the emerging shift towards larger integration of renewable energy into the Grid. Moreover, it is strange that HPGCL did not maintain a coal stock of even 30 days as mandated under Regulation 22.1 of the MYT Regulations in the months of August 2021 onwards especially during the period when coal shortage was at its peak, so much so that the Commission vide its Memo No. 2921 / HERC / tariff dated 09/11/2021 and Memo No. 3996 / HERC / Tariff dated 06.12.2021 had to call for a status report and subsequently directed HPGCL 'to ensure the coal availability in future, in accordance with the guidelines issued - Central Electricity Authority Guidelines as well as the provisions in the HERC MYT Regulations, 2019'. However, still HPGCL, may, in its wisdom, considering past trend and expected scheduling of HPGCL's Units, increase the fuel stock to 60 days. It is made clear that no consequential / incidental relief in terms of GCV deterioration or additional working capital and interest thereto, shall be claimed by the petitioner. Thus, no trueup / pass through etc. shall be considered by the Commission on this account including penalty, if any, for short lifting and demurrage paid to the Railways.

HPGCL is directed to intimate the Commission, on a quarterly basis, the monthly average coal stock maintained by it in terms of quantum and days of generation at actual generation levels.

8.6 MoEFFCC notification dated 25.01.2016 under 'Change of Law' for transportation of fly ash. That expenditure incurred by HPGC for transportation of fly ash, needs to be allowed as pass through, under "change of law", due to MoEFCC notification dated 25.01.2016.

Commission's View: The Commission is aware of the Ministry of Power (MoP) instructions/guidelines dated 22.09.2021 wherein it has been observed that fly ash is emerging as a valuable commodity and it should be auctioned through a transparent bidding process. It has been further provided that the transportation cost, wherever required, is to be borne as per the provisions of MOEF&CC notification by the power plants, discovered through competitive bidding basis only. The MoP in its letter dated 08.11.2021 has clarified that the guidelines dated 22.09.2021, are applicable for new commitments and thermal power plants may continue to provide fly ash (including pond ash) for national assets creation projects (including NHAI) under their existing commitments based on transportation rates arrived at on the basis of transparent bidding/state schedule of rates, whichever is lower as per Central Electricity Regulatory Commission (CERC) norms.

It flows from the above that the transportation rates are essentially required to be discovered through transparent bidding and HPGCL ought not to solely rely on NHAI for the same, as HPGCL is the ultimate bearer of the cost of transportation involved.

Further, HPGCL has not explained that how it was disposing off the fly ash (including pond ash) before signing of MoUs with NHAI. The Commission observes that HPGCL has accumulated Rs. 484.75 Crore out of sale proceeds of fly ash and not offered the same as non-tariff income but kept the amount as a separate fund designated as "Dry Fly Ash Fund". HPGCL is required to explain the exigencies involved in signing of these MoUs involving huge liability, on the

basis of MoEFCC notification, even without discovering the transportation rate through competitive bidding process, when it was already disposing off the fly ash (including pond ash) in a commercial manner, without incurring extra cost and its "Dry Fly Ash Fund" kept on swelling. PTPS has reduced the pond ash availability from 328.64 lac MT as on 29.02.2020 to 298.98 lac MT as on 31.03.2021.

9 Additional data/details provided by HPGCL

The Commission, after initial scrutiny of the petition, sought a few additional data / information, the same was provided by HPGCL vide Memo no. 231/HPGCL/Reg.-522 dated 22.12.2021. The additional submissions of the Petitioner, in response to the Commission's Memo No. HERC / Tariff / 4006-07 dated 07.12.2021 has been taken on record.

10 Procedural Aspects, Analysis & Order of the Commission

In line with Section 64 of the Electricity Act, 2003 and Haryana Electricity Regulatory Commission (Conduct of Business) Regulations, 2019, the Commission scheduled a hearing on 12.01.2022 in order to afford an opportunity to the stakeholders to present their objections / suggestions on the present petition of HPGCL. In response to the public notice no comments / objections were filed by any stakeholder including the distribution licensees/HPPC. However, acceding to the request of the representatives of HPPC, present in the hearing, allowed them three days to file written objections/comments, in view of the fact that most of their officers were unavailable due to COVID-19 infection. However, even after allowing the extended period for filing of objections/comments, the same were not filed by Discoms/HPPC within the requisite time.

11 The intervener i.e. Executive Engineer / RA UHBVN, Panchkula, after significant delay filed its comments vide Memo No. Ch-50 / RA / F-25 / Vol – (80) dated 09.02.2022. On the issue of scheduling the intervener has suggested that HPGCL needs to work more efficiently and economically to minimize the operating cost and fuel consumption to figure in the merit order stack. On coal stock, the intervener has suggested that prudence cheek of coal stock position at HPGCL plants is required to be done. The intervener has also pointed out large variations in the month to month variable cost of HPGCL. Further, it has ben submitted

that PTPS Unit – 6 was not scheduled even on merchant basis because the Hon'ble Commission did not approve the same vide order dated 16.09.2021 given the demand – supply position of power. The intervener has objected to increase in auxiliary energy consumption of PTPS Units by 0.8% as prayed for by HPGCL and has requested the Commission to restrict the same as per the MYT Regulations, 2019.

On the issue of fly ash disposal, the intervener has sought directions from the Commission to the effect that the petitioner herein should provide the fly ash to end users through a transparent bidding process in line with the MoP instructions dated 22.09.2021.

On the issue of true-up of O&M and Depreciation for the FY 2021, the intervener has submitted that under recovery and deprecation in respect of RGTPS – 2 ought not to be compensated or allowed as a pass through. Further, HPGCL ought not to be allowed to claim benefit of restructuring of loans in the subsequent years. Fixed cost recovery of WYC HEP was also raised by the intervener.

Additionally, on the issue of increase in coal stock, the intervener has submitted that "arrangement of fuel is the sole responsibility of HPGCL. Hence, HPGCL has to put its best efforts for arrangement of fuel. However, continuation of scheduling cannot be ascertained and will depend upon variable cost / merit order dispatch.

The petitioner herein, vide Memo No. 31/HPGCL/REG-522 dated 11.02.2022, filed a rejoinder on the submissions made by UHBVNL against the ARR petition under consideration of the Commission. The petitioner, in its preliminary submission has requested that this Hon'ble Commission ought to reject the objections filed by the intervener after a delay of 20 days without any justification or seeking condonation of delay by way of a separate application in the matter. Nonetheless, the petitioner filed para wise and detailed rebuttal to the objections / suggestions of the intervener.

Commission's View: The Commission has taken note of the above and agrees to the rejoinder filed by the petitioner herein that despite this Commission's specific order dated 12.01.2022, HPPC failed to file its comments / objections within 7 days i.e. by 19.02.2022. Hence, the Commission is not expressing any views on the contentions of the intervener as

well as the rejoinder filed in the matter by the portioner. It is however, observed that neither the intervener nor the petitioner has raised any new or substantial issue for consideration of the Commission.

12 State Advisory Committee (SAC)

In order to take forward the consultation process and to have the benefits of the views / suggestions of the Members of the SAC, a meeting of the State Advisory Committee, constituted under Section 87 of the Act, was convened on 18.01.2022 to discuss the petition filed by the Haryana Power Utilities including HPGCL. The views of the SAC Members, on the issue germane to HPGCL, as expressed by Shri V.S. Ailawadi, former and founder Chairman of HERC, was that the characteristic of HPGCL power plants 'base load' or otherwise ought to be seen in terms of cost and operating efficiencies at which it conducts its business.

Commission's Analysis and Order

The Commission, while passing the present has considered the petition filed by HPGCL, additional information provided by them from time to time, oral submissions made in the public hearing held on 12.01.2022 as well as the views expressed by the SAC Members in the meeting held on 18.01.2022.

At the onset, the Commission reiterates that the present order is confined to the true up of FY 2020-21 as well as determination of generation tariff for the FY 2022-23 in accordance with the HERC MYT Regulations, 2019. Hence, the issues pertaining to the FY 2021-22 shall be considered by the Commission while undertaking similar exercise in the FY 2023-24 in line with the HERC MYT Regulations, 2019.

13 FY 2020-21 True-Up

The Commission has considered the submissions of the petitioner regarding 'true up' of various expenses for the FY 2020-21. While considering the true-up petition of HPGCL for the FY 2020-21, the actual expenditure as per the audited accounts of the FY 2020-21 vis-à-vis the expenses approved by the Commission vide its Order dated 24.04.2020 for the FY 2020-21 has been reckoned with. Accordingly, the Commission has allowed or disallowed, as the case may be, recovery of the trued-up amount in accordance with the provisions of the MYT Regulations, 2019.

At the onset, it is observed that HPGCL has claimed true-up of the recovered expenses vis-à-vis actual expenses, citing Regulation 13 and 30 of HERC MYT Regulations, 2019.

The Commission has carefully examined the Regulations cited by the petitioner in support of its claim. The regulation 13.4 provides that "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." The Commission observes that this clause in the MYT regulations is meant for DISCOMs only, where at times the ARR remains unrecovered through tariff. In that event, the unrecovered amount is allowed to be adjusted in the ensuing year by appropriate resetting of tariff. The generating companies are allowed to recover their full annual fixed cost under regulation 30 of HERC MYT Regulations, 2019, based on their plant availability. The generating plant shall recover full capacity charges at the normative annual plant availability factor specified by the Commission. Recovery of capacity charges below the level of target availability shall be on pro-rata basis. No capacity charges shall be payable at zero availability. Thus, in case availability of the plant is below the normative plant availability, it will not be able to recover full fixed cost and some portion will remains unrecovered. This has been provided in order to provide equity on both the sides. While DISCOMs pay fixed costs for the power which remains available to them up to the level of norms and the same time generator is required to be geared to generate in order to recover fixed cost. The generator is not allowed to claim the unrecovered fixed cost due to their non-availability, in the true-up. DISCOMs are required to pay the fixed cost, only and to the extent of the generator remains available for them.

The Commission further observes that the similar issue was also raised by HPGCL in its true-up petition for the FY 2019-2020, albeit on the different grounds i.e. non-recovery of expenses due to "force majeure" conditions caused by COVID-19 pandemic and resultantly delay in capital overhauling of RGTPP-1.

The Commission re-iterates its decision taken in its order dated 18.02.2021 (HERC/PRO-76 of 2020) that the present true-up exercise is being carried out with respect to the fixed cost already approved vis-vis actual cost incurred. The basis, details and the amount to be trued up under each head are discussed in the paragraphs that follow.

14 Operation and Maintenance (O&M) Expenses

As per the provisions of the HERC MYT Regulations, 2019, regarding the basis and admissibility of truing-up, the Commission has examined the Audited Accounts of HPGCL for the FY 2020-21, true-up petition of HPGCL submitted vide memo no. 219/HPGC/Reg-522 dated 29.11.2021 and additional information submitted by HPGCL. It is observed that HPGCL has sought true-up amounting to 145.31 Crore on account of O&M expenses (Recovered -Rs. 729.70 Crore minus actual – Rs. 875.01 Crore).

The Commission, on perusal of the claims, observes that the actual employee cost incurred (Rs. 637.86 Crore) by HPGCL includes claim towards retirement benefits of employees - Rs. 402.08 Crore. The unit-wise employee cost approved by the Commission and actually incurred for the FY 2020-21, is tabulated below:-

Rs. in crore	PTPS -6	PTPS -7	PTPS - 8	RGTPS 1	RGTPS 2	DCR TPS 1	DCR TPS 2	WYC	TOTAL
Approved	76.81	70.39	70.39	100.86	100.86	74.45	74.45	22.96	591.17
Actual	78.80	97.15	93.73	101.01	101.01	72.02	72.02	22.12	637.86

In this regard, the Commission observes that the Regulation 8.3.8 (a) & 8.3(b) of the MYT Regulations, 2019, provides as under: -

- (a)The variation on account of uncontrollable items shall be treated as a passthrough subject to prudence check/validation and approval by the Commission;
- (b) The items in the ARR shall be treated as "controllable" or "uncontrollable" as follows:-

ARR Element		Controllable /		
		Uncontrollable		
Terminal liabilities with rega	rd to employees on account of	Uncontrollable		
changes in pay scales or dearne	ss allowance due to inflation.			

In view of the above, the terminal liabilities incurred on account of changes in pay scales or dearness allowance due to inflation are considered as uncontrollable and accordingly Rs. 637.86 Crore has been considered for true-up.

The Commission observes that HPGCL has claimed total Repair & Maintenance expenses (R&M) amounting to Rs. 191.88 Crore. Further, the Commission has also perused the unit-wise R&M expenses approved by the Commission and actually incurred for the FY 2020-21, as tabulated below:-

	PTPS -6	PTPS -7	PTPS - 8	RGTPS 1	RGTPS 2	DCR TPS 1	DCR TPS 2	WYC	TOTAL
Approved	8.50	26.12	26.12	24.76	24.76	29.97	29.97	2.93	173.13
Actual	13.31	28.03	18.41	27.20	28.98	35,66	35.87	4.42	191.88

The Commission observes that actual R&M expenses of all the units are higher than the approved amount. HPGCL has submitted that increase in R&M is primarily attributable to the cost of R&M being carried for RGTPP Unit 2 and also on account of R&M for PTPS Unit 6 (which was allowed at 50% of the norms). HPGCL in its reply dated 22.12.2021 has explained that the cost of water has increased from Rs. 15.50 crore to Rs. 22.31 crore due to the revision in rate of water by irrigation department w.e.f. 01.06.2018.

The R&M expenses of Rs. 191.88 Crore claimed by HPGCL includes the followings:-

- a) Additional Auxiliary Consumption (Rs. 14.16 Crore) on account of power drawn from Grid when the plants were not on bar, included under other operating expenses.
- b) SLDC charges (Rs. 2.82 Crore).
- c) Other debits (Rs. 2.68 Crore) on account of written off of the inventory items relating to decommissioned PTPS Units 1 to 4.
- d) Other operating expenses related to coal handling plant (Rs. 52.37 Crore): HPGCL has explained that this cost relates to the fixed nature of payment to contractors for operation & maintenance of coal handling plant, salary paid by HPGCL to railways staff deployed by Northern Railways at HPGCL site. It also includes salary paid under contract, R&M of marshalling yard, land license fee, operation & maintenance of heavy machinery engaged in feeding of coal after unloading of coal. The Commission observes that corresponding amount was not reflected in the audited balance sheet of the previous years. HPGCL explained that the same is due to the fact that earlier it was shown as part of fuel cost.

The Commission in its earlier orders dated 24.04.2020 and 18.02.2021, has not approved the Additional Auxiliary Consumption. In this regard, the Commission in its ARR Order dated 24.04.2020, had directed HPGCL "to take remedial measures to address the issue of frequent backing down. Such relief, which is not supported by HERC MYT Regulations same shall not be considered in future."

Accordingly, the Commission is not inclined to approve "Additional Auxiliary Consumption" amounting to Rs. 14.16 Crore as claimed by HPGCL, which is beyond the provisions of the HERC MYT Regulations, 2019.

The Commission observes that SLDC charges (Rs. 2.82 Crore) claimed by HPGCL as part of O&M expenses, has already been claimed from DISCOMs by raising invoices. The recovery of SLDC charges (Rs. 2.82 Crore) is appearing in Note 30 of the Audited Financial Statements for the FY 2020-21 submitted by HPGCL. **Therefore, the same shall not form part of true-up under O&M expenses.**

Further, the Commission in its earlier order dated 24.04.2020 had not approved any expenses in relation to the decommissioned units which may be set-off against its salvage value. In this regard, the Commission observes the submission of HPGCL that it has realized Rs. 149.63 crore from the disposal of Plant & Machinery/Civil Structure of de-commissioned PTPS Units 1 to 4. Also, the written off / scrapped amounts cannot be allowed as part of O&M expenses. The Commission in its order dated 18.02.2021, has allowed HPGCL to retain Rs. 56.80 Crore profit derived from disposal of assets, although liable to be included in Non-Tariff Income, to discharge any contractual obligations against the closed units. Further, no such provision for 'writing off' exists in the HERC MYT Regulations for a generating company.

Accordingly, Other debits (Rs. 2.68 Crore) on account of written off of the inventory items relating to decommissioned PTPS Units 1 to 4, are not approved as part of O&M expenses. HPGCL is directed to submit details of the total amount realized from sale of assets and liabilities met thereto so that the same can be taken for true-up.

Regarding R&M cost related to coal handling plant (Rs. 52.37 Crore), the Commission observes that there is change in the practice by HPGCL of claiming expenses relating to coal handling. Prior to the FY 2020-21, it was treated as part of coal cost and claimed as Energy Charge Rate (ECR). Whereas, in the FY 2020-21, it has been claimed as fixed cost under R&M expenses. The Commission observes that norms of R&M for the MYT period of 01.04.2020 to 31.03.2025 were fixed based on the corresponding figures for the FY 2017-18 and in the audited figures of the FY 2017-18, these expenses did not form part of the R&M expenses.

The Commission has considered the order dated 11.07.2018 (Petition No. 93/MP/2017) passed by Hon'ble Central Electricity Regulatory Commission, wherein Kerala State Electricity Board Limited (the petitioner) asserted that "other charges" comprising of stone picking charges, loco drivers' salary and sampling charges etc. shall be booked/met to/from O&M expenses. Whereas, NTPC (the respondent) contended that these expenses are incidental to the process of bringing coal till unloading point of the generating station; accordingly, not included in the O&M expenses. NTPC further asserted that these expenses were not even formed part of the O&M expenses of the base year (FY 2008-09 to 2012-13) which was considered while determining the norms of O&M expenses in the Tariff Regulations, 2014. Hon'ble CERC has held as under:-

"28. The 2014 Tariff Regulations provides for computing the energy charges considering the landed price of fuel. Landed price would take into account charges paid to Coal Company, the transportation cost and all incidental costs involved in bringing coal upto the unloading point. The expenses indicated by NTPC and MPL are in the nature of incidental costs involved in bringing coal upto the unloading point. These charges have been shown separately only to indicate them as charges paid in addition to what is paid to coal companies and transportation companies and are therefore, part of landed cost of fuel. Therefore, the claim under other charges is not illegitimate as pleaded by the Petitioner."

Thus, following the ratio of the judgement Supra, the Commission, at this stage, is not inclined to accept the change of accounting practice by HPGCL without even including any specific prayer for the same in their petition and decides that the landed price of coal includes charges paid to coal company, the transportation cost and all incidental costs involved in bringing coal up to the unloading point. HPGCL should have claimed this cost as part of ECR, as per their existing practice and the practice being adopted by NTPC. The Commission is of the view that the practice of charging cost to ECR, uniformly across the generators and generator inter-se, helps in the preparation of correct "Merit Order Despatch" by DISCOMs. Further, such change in the important accounting practices, without even adequate disclosures / prayers, derails the "Merit Order Despatch" prepared by DISCOMs. Therefore, coal handling expenses (Rs. 52.37 Crore) are not approved as part of R&M expenses.

Accordingly, R&M expenses i.e. Rs. 119.85 Crore (Rs. 191.88 Crore minus Rs. 14.16 Crore minus Rs. 2.82 Crore minus Rs. 2.68 Crore minus Rs. 52.37 Crore) is considered for true-up for the FY 2020-21.

The A&G expenses approved by the Commission for FY 2020-21 was Rs. 24.483 cr. As against this, the actual A&G expense for the year swelled to Rs. 45.27 cr. The Commission observes that increase in A&G expenses is mainly attributable to the donation of Rs. 21 crores given by HPGCL to CM Corona Relief Fund on account of outbreak of pandemic COVID 19 in March 2020. Accordingly, the Commission true-up the same at actual level i.e. 45.27 Crore.

Thus, the actual allowable O&M expenses for the FY 2020-21 works out Rs. 805.80 Crore (Rs. 637.86 Crore + Rs. 122.67 Crore + Rs. 45.27 Crore), as against the approved O&M expenses of Rs. 788.79 Crore. Therefore, the balance O&M expenses amounting to Rs. 17.01 Crore (Rs. 788.79 Crore - Rs. 805.80 Crore) is now considered for the purpose of true up.

15 True-up of Depreciation

The Commission has carefully examined the submissions of HPGCL that the actual depreciation in the FY 2020-21 was Rs. 333.40 Crores (net of solar business) as against the approved depreciation of Rs. 332.85 crore. It has been further submitted that the depreciation on account of capitalization of spares and decommissioning cost is Rs. 17.17 Cr. Hence, the net allowable depreciation for FY 2020-21 exclusive of Solar business and depreciation on spares and Decommissioning Cost is Rs. 316.23 Cr (333.40-17.17).

Therefore, the actual allowable depreciation for the FY 2020-21 works out to Rs. 316.23 Crore against the approved depreciation of Rs. 332.85 Crore. Therefore, the Commission allows true-up of Rs. (-) 16.62 Crore (Rs. 332.85 Crore minus Rs. 316.23 Crore).

16 True-up for the Interest and Finance Charges

The Commission has examined the submissions of HPGCL that the actual interest and finance charges of HPGCL was Rs. 47.11 Crore (net of Solar Business) as per the audited accounts for the FY 2020-21, as against the approved interest and finance charges on loan of

Rs 86.24 Crore. Interest on term loan was allowed in the order dated 24.04.2020, as per the existing loan profile of HPGCL i.e. post restructuring, subject to true-up.

HPGCL further submitted that it has paid the compensation amounting to Rs. 7.30 Cr. to the land owners of RGTPP, Hisar in compliance to order of Hon'ble Supreme Court and Rs. 0.46 Cr. to the land owners of PTPS, Panipat in compliance of Hon'ble Punjab& Haryana High Court. The entire compensation is a capital expenditure of HPGCL and has been entirely funded by the State Govt. as equity. As per Regulation 19.2 (b) of the HERC MYT Regulations 2019, the capital expenditure is to be funded in the Debt Equity ratio of 70:30. Equity in access of 30% would be treated as normative loan/ debt for the purpose of tariff determination and true-up. Accordingly, HPGCL has considered Rs. 5.43 Crore being 70% of the capital expenditure incurred on the land compensation of Rs. 7.76 Crore (7.30+0.46) as normative debt at 8.5% rate of interest (average actual rate of interest of HPGCL). The normative interest expense so incurred stands at Rs 0.23 Cr. The same has been added to the final true-up of FY 2020-21.

Interest and Finance charges for FY 2020-21 as per pre-restructuring Loan portfolio excluding solar business is given below: -

Particulars	Rate of	Opening Bal	Drawls	Repaymen	Closing	Interest
	Interest		during the	ts during	Balance	during the
			year	the year		year
GPF Bonds	7.10%	40.69	0.00	6.78	33.91	2.41
SBI DCRTPP YNR	12.50%	512.66	0.00	120.64	392.02	56.54
REC	12.25%	501.64	0.00	75.60	426.04	56.82
State Bank of	11.45%	539.94	0.00	101.64	438.30	56.00
India(RGTPP)	Ţ					
APDP Loan	12.50%	3.11	0.00	0.15	2.96	0.38
Punjab National Bank	8.65%	21.05	0.00	20.00	1.05	0.96
(Andhra Takeover)						
Punjab National Bank	8.65%	57.40	0.00	38.00	19.40	3.32
(Andhra Takeover Hisar)						
Punjab National Bank	12.25%	122.77	0.00	20.52	102.25	13.78
REC Takeover						
NABARD	5.25%	45.99	0.00	11.50	34.49	2.31*
Total		1845.25	0.00	394.83	1450.42	192.52

 $^{^{*}}$ Total Interest during the year excluding solar business 192.52- 2.31= 190.22Cr

HPGCL has further submitted actual Interest and Finance charges for FY 2020-21 excluding solar business as under:

Particulars	Rate	Opening	Additions	Repayments	Closing	Interest
	of	Bal	during the	during the	Balance	during the
	Interes		year	year		year
	t (%)					
GPF Bonds	7.10	40.69	-	6.78	33.91	2.41
SBI (DCRTPP)	-	-	-	-	0	0
REC	7.75	453.53	-	75.6	377.93	34.69
SBI(RGTPP)	-	-	-	-	0	0
APDP Loan	12.50	3.11	-	0.15	2.96	0.39
PNB(Andhra Takeover)	8.50	22.20	-	22.20	0	0.92
PNB(Andhra Takeover, Hisar)	8.50	56.93	-	56.93	0	2.47
PNB Loan	8.50	122.77	-	122.77	0	5.95
NABARD	5.25%	45.99		11.50	34.49	2.31*
PNB (SBI takeover)		21.14	-	21.14	0	0.28
Total		766.36	0	317.07	449.22	49.42

^{*}Solar business

HPGCL submitted that the reduction in interest & Finance Charges is a direct result of the financial due diligence of HPGCL. As per Regulation, the Commission may allow to retain 50% of the savings. Accordingly, HPGCL has proposed to pass on 50% of the savings on interest and finance charges to the beneficiaries and consider the true up of interest & finance charges as given below: -

Particular	Approved interest & Finance Charges	Actual interest & Finance Charges	Pre- restructuring interest & Finance Charges	Allowable interest & Finance Charges	Recover ed by HPGCL	True-up
1	2	3	4	5=3+50% (4-3)	6	7=5-6
Int.& Fin. Charges (A)	86.24	47.11	190.22	118.66	70.12	48.54
Int. On Normative Debt(B)	0	0	0	0.23	0	0.23
Total True up of Int.& Fin. Charges(A+B)	86.24	47.11	190.22	118.89	70.12	48.77

HPGCL has therefore, requested to allow Rs 48.77 Cr. as pass through of Interest & Finance charges.

Further, the Commission observes the following the provisions of Regulation 12 of HERC MYT Regulations, 2019, relating to incentive and penalty framework:-

- "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
 - (f) Operation & maintenance expenses-Applicable when the actual expenses fall below or exceed the level specified by the Commission.
 - (i) Interest on new long-term loans- Applicable when interest rate falls below or exceeds the level specified by the Commission.
 - (ii) Restructuring of capital cost Applicable when there is a benefit from restructuring of capital cost.
 - (N) 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**."

(Emphasis added)

The MYT regulation 12.2 provides that interest on term loan is subject to incentive and penalty framework on account of changes in the rate of interest, restructuring of capital cost and loan portfolio. While the restructuring of capital cost relates to restructuring of debt & equity, prepayment of debts from introduction of fresh equity/utilization of internal accrual etc. Restructuring of loan portfolio refers to the change in the existing loans w.r.t. the rate of interest/monthly installments/terms & conditions of existing loans etc. In nutshell, the Regulations provides that all the factors relating to changes in rate of interest, swapping of higher interest-bearing loan with low interest-bearing loans and prepayment of loan from internal accruals, are covered by Incentive and Penalty frameworks specified in Regulation clause 12.2.

Now, while undertaking true-up exercise, actual interest cost has to be compared with the interest cost approved in the Order dated 07.03.2019 and 50% of the difference may be allowed to be retained by HPGCL in line with Regulation clause 12.2 of HERC

MYT Regulations, 2019. Accordingly, true up of interest & finance charges is tabulated below: -

Particular	Approved interest & Finance Charges	Actual interest & Finance Charges	Difference of allowed and actual	50% of the difference at (A) allowed to be retained by HPGCL	True- up
1	2	3	4 = 3-2	5= 4 *50%	6=4-5
Int.& Fin. Charges (A)	86.24	47.11	39.13	19.56	19.57
Int. On Normative Debt(B)	0	0.23	0.23	-	0.23
Total True up of Int.& Fin. Charges(A+B)	86.24	47.34			19.80

17 True-up of Return on Equity (ROE)

HPGCL has submitted that the Commission had not approved RoE for the FY 2020-21, in view of the unprecedented situation emanating from the COVID-19 pandemic.

HPGCL has opted for an appeal at Hon'ble APTEL against the issue of disallowance of RoE vides DFR no 216/2020. The same is pending for adjudication at APTEL. Hence, HPGCL has prayed that it reserves its right for reconciliation/ True-up of RoE as per the outcome of the legal recourse opted in the matter.

The Commission observes that the Union Government/ Ministry of Power, vide memo no 11/16/2020-Th-II dated 16.05.2020, had directed all Generation and Transmission CPSE to provide a rebate of about 20-25% on power billed (fixed cost) to Discoms and interstate Transmission charges levied by PGCIL. Accordingly, the Commission decided to reduce the RoE to NIL in view of the unprecedented situation arising out of Covid-19 pandemic, so that similar benefit could be provided to the State Consumers by the state power utilities including the appellant.

Accordingly, the Commission had not allowed RoE for the FY 2020-21, being the unprecedented crisis year. Accordingly, the same, as per the principles of true-up, cannot be considered i.e. true-up is vis-à-vis an amount allowed after due consideration and the actual amount as per the Audited Accounts of the relevant year.

18 True-up of interest on working capital

HPGCL has submitted that the Commission in its Order dated 24.04.2020 regarding generation tariff for FY 2020-21 had allowed average coal and oil prices at prevailing market prices, as proposed by it. However, there has been variation in prices of coal and oil during the FY 2020-21. Therefore, while computing the truing-up of working capital FY 2020-21, actual rate of coal and oil prevailing in FY 2020-21 has been considered.

Due to variation in Fuel prices, the interest on normative working capital requirement for FY 2020-21, as per the approved norms of the HERC, has decreased to Rs 106.03 Cr against the approved interest on working capital of Rs 109.668Cr. HERC has approved the Interest on Working Capital @ 8.65% (7.40%+1.25%). However, due to change in interest rate, the allowable IWC as per Regulation 22.2 of MYT 2019 has been reduced to 8.60% which is liable to be pass through under the True-up. HPGCL has requested to allow the difference of Rs 17.75 Cr. as true-up of interest on working capital for FY 2020-21, as tabulated below:-

Particular	Approved IWC (Rs. Cr.) @ 8.65% (A)	Normative IWC (Rs. Cr.) @ 8.60% (B)	Actual IWC (C)	Recovered IWC (D)	True-up Rs. Cr. E=C-D
Interest on working capital	109.668	106.03	115.45	97.70	17.75

The Commission has considered the above submissions and observes that the actual interest on working capital amounting to Rs. 115.45 Crore claimed by HPGCL, includes an amount of Rs. 80.43 Crore notional interest with corresponding credit to the "Provision for IWC and Additional Auxiliary Consumption" appearing under Note 27 of the audited financial statements. It also includes an amount of Rs. 0.21 Crore as the rebate allowed for timely payments by DISCOMs.

As per letter no. letter no. 26/11/2019-Coord dated 22.01.2020 received from Deputy Secretary, Government of India, Ministry of Power, enclosing minutes of conference of the Power Ministers of States and UTs held on 10th-11th October, 2019 at Tent City, Narmada, Gujarat, it was decided that "the Central Commission may issue necessary regulations for reduction in tariff in case of advance payment to the generator.

Appropriate Commission shall ensure that the generation/transmission tariff is duly adjusted due to the reduction in the working capital requirement."

The Commission observes the provisions of Regulation 81 of HERC MYT Regulations, 2019, regarding inherent powers of the Commission to make Orders for ends of justice or to protect consumer's interest, which are reproduced hereunder: -

"81. SAVING OF INHERENT POWERS OF THE COMMISSION

- 81.1 Nothing in these Regulations shall be deemed to limit or otherwise affect the inherent power of the Commission to make such orders as may be necessary for ends of justice or to protect consumers' interest or to prevent the abuse of the process of the Commission.
- 81.2 Nothing contained in these Regulations shall limit or otherwise affect the inherent powers of the Commission from adopting a procedure, which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of the matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient to depart from the procedure specified in these Regulations.
- 81.3 Nothing in these Regulations shall, expressly or by implication, bar the Commission to deal with any matter or exercise any power under the Act for which no Regulations have been framed, and the Commission may deal with such matters, powers and functions in a manner it thinks fit."

The Commission, in exercise of the power conferred upon it by Regulation 81 of HERC MYT Regulations, 2019 as amended from time to time, pass on the early payment rebate of Rs. 0.21 Crore to DISCOMs, in order to implement the decision taken in the conference of the Power Ministers of States and UTs held on 10th-11th October, 2019.

Further, HPGCL ought not to claim 'notional' interest on working capital without actually incurring the same. Accordingly, an amount of Rs. 80.43 Crore claimed by HPGCL as part of interest on working capital is disallowed.

The actual interest on working capital after reducing these two claims, is Rs. 34.81 Crore (Rs. 115.45 Crore minus Rs. 80.43 Crore minus Rs. 0.21 Crore), as against the approved amount of Rs. 109.668 Crore.

Thus, there is substantial difference in between the interest on working capital allowed by the Commission and actual interest on working capital incurred by HPGCL. The Commission further observes that several generating units of HPGCL remained backed down for considerable time, hence, HPGCL's revenue decreased from the normative level of Rs. 6084.54 Crore to Rs. 2947 Crore. Further, the actual generation was also lower in the FY 2020-21 at 5709 MU (34% of the approved generation) as against the normative level of 16728 MU.

The Commission observes that substantial reduction in PLF of all the generating units which is primarily attributable to backing down by the Discoms, is the main reason of lower working capital requirement.

Accordingly, the Commission admits true-up of the interest on working capital to the actual level of Rs. 34.81 Crore and allows the balance Rs. 74.85 Crore (Rs. 109.66 Crore – Rs. 34.81 Crore) to be passed on to the DISCOMs.

19 Cost of Oil (Secondary Fuel Oil)

HPGCL has submitted that in the FY 2020-21, they had incurred expenses on Secondary Fuel Oil amounting to Rs. 15.27 Crore. The said amount was considerably lower than the HERC approved amount of Rs. 47.541 Crore. The prime reason for low oil consumption is lower generation of HPGCL's Power Plants.

The Specific Fuel Oil Consumption in ml/kwh (SFC) had decreased from the approved HERC norm of 0.50 ml/kwh to 0.28 ml/kwh for DCRTPP-1 and 0.37 ml/kwh for DCRTPP-2. Whereas, SFC has increased for all other generating units of HPGCL, during the FY 2020-21. HPGCL has claimed that higher oil cost was incurred due to higher start-stop operations of its units.

The Commission observes that SFC is subjected to incentive penalty framework, as per Regulation 12.2 (b) of HERC MYT Regulations, 2019. Further, Regulation 12.5.2 provides that in case of loss, "the item wise losses on account of controllable factors in case of a generation company/transmission licensee, unless otherwise specifically provided by the Commission, shall be borne by the generation company/transmission licensee."

Therefore, oil cost can be allowed only up to the norms specified in the MYT Regulations, 2019 to the extent of actual generation only.

The same has been calculated in the table below:-

Parameters	Unit	Derivation				RG TPS		DCR TPS		Total HPGCL
			Unit 6	Unit 7	Unit 8	Unit 1	Unit 2	Unit 1	Unit 2	
ACTUAL GENERATION	MU	A	51.93	619.48	547.08	1230.98	405.92	1316.67	1294.75	5466.81
Specific Oil Consumption	ml/kwh	В	1	0.5	0.5	0.5	0.5	0.5	0.5	
Oil Consumption	KL	C=A*B	52	310	274	615	203	658	647	
Cost of Oil per KL	Rs/KL	D	51515	51515	51515	51156	51156	52736	52736	
Total Cost of Oil	Rs .Mln	E=C*D	2.68	15.96	14.09	31.49	10.38	34.72	34.14	143.45

Consequently, the saving in oil cost due to low generation amounting to Rs. 33.19 Crore (Rs. 47.541 Crore minus Rs. 14.345 Crore), shall be passed on to the beneficiaries / Discoms.

20 True-up of Non-tariff Income

The Commission observes that HPGCL has reported other income (Non-operating Income) of Rs. 5.39 Crore in the FY 2020-21, as detailed below: -

Particulars		Amount (Rs. in crore)
Income from sale of scrap		3.78
50% of other income		1.61
Total		5.39

Details of other income, as per audited financial statements of HPGCL for the FY 2020-21, has been tabulated as under:-

Particulars	Amount (Rs. in crore)
Interest income including delayed payment charge	10.89
Income from sale of scrap	3.78
Other Income	3.23
Total	17.90

The Commission in its earlier orders has observed that generally, the generating companies should not have any non-tariff income. The non-operating income of generating company can be on account of sale of scrap, ash etc. The same should be reduced from the coal cost/O&M expenses/reduced from true-up amount approved by the Commission.

Accordingly, other income amounting to Rs. 7.01 Crore (excluding interest income) has been reduced from the amount eligible for true up in the present Order.

In view of the above discussions, the Commission allows true-up expenses for the ${
m FY}\ 2020\mbox{-}21$ as under: -

(Rs. Crore)

	HPGCL (Proposed)	HERC (Allowed)
O&M Expenses	145.31	17.01
Depreciation cost	29.39	(16.62)
Interest Cost	48.77	19.80
ROE	0	0
Interest on working capital	17.75	(74.85)
Oil Cost	1.04	(33.19)
Non-Tariff Income	(5.39)	(7.01)
Total True-up	236.87	(94.86)
Add: Holding Cost @ 8.25% from 01.04.2021 to 31.03.2022 (12 months)		(7.82)
Total True-up including holding cost		(102.68)

Discoms i.e. UHBVNL and DHBVNL shall recover the aforesaid amount of Rs. 102.68 Crore from HPGCL. The same shall become immediately payable upon the submission of credit note and late payment charges shall be accordingly applicable in accordance with Regulation Clause 43 of the MYT Regulations, 2019. The major difference between the true-up amount as worked out by HPGCL and that approved by the Commission is majorly on account of disallowance of O&M expenses, interest cost on working capital, Oil cost and Depreciation. Further, HPGCL had claimed true-up of the recovered expenses vis-à-vis actual expenses, whereas the true-up of the approved expenses is undertaken in the present Order.

21 Capital Investment plan

The Commission in its tariff order dated 18/02/2021 in case no. HERC/PRO 76 of 2020 had approved Rs. 29.27 Crore for the FY 2020-21, Rs. 80.52 Crore for the FY 2021-22, Rs. 26.87 Crore for the FY 2022-23, Rs. 1.01 Crore for the FY 2023-24 and Rs. 7.00 Crore for the FY 2024-25.

The Commission observes that out of the approved capital expenditure for FY 2020-21, capital expenditure work to the time of Rs.7.29 Cr has been completed and capital expenditure work to the tune of Rs. 7.96 Cr has been dropped off due to non-requirement.

In the revised CAPEX, HPGCL has not included CAPEX for new environmental norms; only indicative figures have been mentioned in the petition since the CAPEX in respect of implementation of norms is yet to be finalized. HPGCL will approach the Commission with its actual expenditure for approval.

In the revised plan capital, the most of capital expenditure works approved vide order dated 18.02.2021 have been deferred one or two years.

The Commission has considered the submissions and approves the revised capital expenditure as submitted for FY 2021-22 to FY 2024-25, except for the proposed Capex for PTPS Unit – 6. HPGCL is directed to submit the details of the scheme, bidding process followed, EOI, request for proposal, negotiation if any with the bidder & purchase order to the Commission for considering the same for true up of FY 2021-22 and ARR for the FY 2022-23.

Operating Parameters:

As per past experience HPGCL may not also be able to dispose of un-requisitioned / surplus power from PTPS Units – 6 through the power exchange as the 'trade off' between cost of running the said power plant and the cost of RTC power available in the exchange will also not justify the Unit to be kept under Reserve Shutdown as well. Resultantly, to reduce the cost of power purchase borne by the electricity consumers of Haryana, it would be in the public interest to de-commission PTPS Unit – 6 with immediate effect. Therefore, pending decision of the State Government on the de-commissioning of PTPS Unit -6 and in line with the order of Hon'ble Appellate Tribunal for Electricity (APTEL) dated 24.09.2021, the Commission has proceeded to determine generation tariff.

Annual Generation and PLF): -

The table below shows the unit wise annual generation trend in MU and PLF (%): -

Annual Generation Trend (MU)

Unit	2018-19	2019-20	2020-21	2021-22 (up to Sept)	Avg. Of Last 3 FY
PTPS-6	324.00	0.00	51.93	0.00	93.98
PTPS 7	1308.75	884.46	619.48	433.17	811.47
PTPS-8	1569.40	1088.33	547.08	406.01	902.71
DCRTPP-1	1346.78	1574.14	1316.67	410.17	1161.94
DCRTPP-2	1974.87	1166.89	1294.75	766.77	1300.82
RGTPP-1	1622.71	768.95	1230.98	1045.68	1167.08
RGTPP-2	2229.48	1547.17	405.92	0.00	1045.64
HPGCL Thermal	10375.99	7029.94	5466.81	3061.8	6483.635
Hydel	237.68	300.03	242.91	120.17	225.20

The unit wise plant load factor of the HPGCL is as under:

Unit wise PLF Trend (%)

eme wise I El Trend (70)							
Unit	2018-19	2019-20	2020-21	2021-22 (up to Sept)	Avg. Of Last 3 FY		
PTPS-6	17.61	0.00	2.82	0.00	6.81		
PTPS 7	59.76	40.28	28.29	39.45	42.78		
PTPS-8	71.66	49.56	24.98	36.98	48.73		
DCRTPP-1	51.25	59.74	50.10	31.13	53.70		

Unit	2018-19	2019-20	2020-21	2021-22 (up to Sept)	Avg. Of Last 3 FY
DCRTPP-2	75.15	44.28	49.27	58.19	56.23
RGTPP-1	30.87	14.59	23.42	39.68	22.96
RGTPP-2	42.42	29.36	7.72	0.00	26.50
Hydel	43.48	54.74	44.44	43.85	47.55

HPGCL has submitted as under: -

- i) The less scheduling of HPGCL units is primarily attributed to less demand placed by the beneficiary i.e. Haryana Discoms to HPGCL. The same is beyond the control of the HPGCL.
- ii) HPGCL plants are facing frequent backing downs/ less scheduling due to the improper procedure for the merit order dispatch being adopted by Discoms, which is primarily based on marginal cost savings and doesn't reflect the true cost of power to consumers. The said system needs to be reviewed for providing just and equitable opportunity to the State based Generators.
- iii) The frequent backing downs/ Start stop operations of the HPGCL generating stations not only increases metallurgical failures/ degradation of the plants but also severally affects the performance parameters of the generating units. The less demand from the Discoms is the sole reason for Haryana State based Generators to have the low PLF as under. Historical PLF of State Based Generators, is as under: -

Year	APCPL	CLP	FGPS	HPGCL		
				PTPS (7&8)	DCRTPP	RGTPP
2017-18	60.03	64.97	22.99	47.15	65.60	44.53
2018-19	56.51	60.18	16.51	65.71	63.20	36.65
2019-20	28.96	50.52	14.92	44.92	52.01	21.97
2020-21	47.85	46.99	25.08	26.63	49.68	15.57*

iv) Number of start and stop operations due to the instructions of the beneficiary during past years is given in the below table: -

Historical Start - Stop Operations

	PTPS 6	PTPS 7	PTPS 8	DCRTPS 1	DCRTPS 2	RGTPS 1	RGTPS 2
FY 2017-18	8	12	14	4	5	11	8
FY 2018-19	12	15	8	8	6	9	10
FY 2019-20	•	12	10	5	5	6	8
FY 2020-21	2	11	11	8	12	6	4
FY 2020-21 (up to 09/21)*	-	6	3	1	3	4	-

* As per Regulation 34 of the HERC MYT 2019, the maximum cap for Start/Stop operation is fixed at 07 Nos, whereas the HPGCL is on the verge of crossing the said limit in FY 2021-22 for PTPS Unit 7. 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.

Backing Down of Thermal Generating Units of HPGCL

The historical trend of the backing down, submitted by HPGCL in respect of its generating stations is given below: -

Historical Backing down (MU) for the years (ending Sept.)

Unit	2018-19	2019-20	2020-21	2021-22 (upto Sept)
PTPS – 6	81.80	100.00	86.89	100.00
PTPS – 7	39.03	54.13	61.46	59.22
PTPS – 8	27.19	50.24	74.25	62.16
DCRTPP-1	18.26	41.11	51.02	23.40
DCRTPP-2	23.33	21.68	50.28	41.31
RGTPP-1	52.61	48.77	67.05	59.83
RGTPP-2	54.08	70.59	39.42	0.00

The above reveals that HPGCL generating plants are facing massive backing down in the last years which is continuously rising and has touched the alarming level in the first half of the FY 2021-22.

It has been submitted that such significant backing down has adversely impacted HPGCL in the following ways: -

- i) While HPGCL generating units are placed under Reserve Shut Down (RSD) by Discoms, certain essential auxiliaries need to remains on bar for making Units available which require continuous drawl of electricity from the grid in absence of its own generation. This results into burdening of Additional Auxiliary Consumption (AAC) for HPGCL units. Thus, the same needs to be compensated separately.
- ii) SHR degradation has also been observed on account of running of Units at low PLF on account of less demand, needs to be compensated as per MYT Regulation 2019.
- iii) The condition of minimum off take of coal under FSA leads to coal stock pile up and its handling issues on account of low scheduling is major challenge and any loss on account of the same is beyond the control of HPGCL needs to be pass through.
- iv) The reference is invited to HERC order dated 30.03.2021 in 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."

The above directive of the 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.

v) Frequent backing down/ Start stop operations affects the operational life cycle of plants resulting in higher repair and maintenance expenses due to metallurgical degradation/ frequent failures, the same needs to be considered as pass through beyond the permissible limits, if required.

HPGCL has proposed NAPAF of its plants for FY 2021-22 in line with Tariff Order dated 18.2.2021 for FY 2021-22 and for the FY 2022-23 in line with HERC MYT Regulation, 2019 as tabulated below: -

NAPAF for FY 2020-21 and FY 2021-22

S.N	Unit #	Approved	Proposed	
		FY 20-21	FY20-21	FY 21-22
1	PTPS 6	35.00%	35.00%	85.00%
2	PTPS 7	85.00%	85.00%	85.00%
3	PTPS 8	85.00%	85.00%	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	46.00%	46.00%	46.00%

The Commission observes that PLF of HPGCL plants is much below the norms/the approval of the Commission. The reason for the low PLF achieved is backing down of its plants by the beneficiary Discoms. Further, these units are not scheduled because of their higher energy charges as compared to the other competitive sources of power available to the Discoms. The other reason for less scheduling is its limited capability in operating these units at a lower technical minimum capacity viz other similar plants in central sector to handle the increasing RE Power availability in the Discoms' Power Pool. In view of above it becomes very important for HPGCL to improve upon its capability to run its plants more efficiently and economically to minimize the cost of its operation and fuel consumption. It is also desired that the HPGCL takes technical initiative to run these units at lower level as required under the circumstances to remain in merit Order and absorb the available RE Power by ramping up and down the Units.

The Commission further observes that the average PLF of last 3 years i.e. FY 2018-19, FY 2019-20 & FY 2020-21 of PTPS 6, PTPS 7, PTPS 8 is 6.81%, 42.78% and 48.73% approximately and in the first half of FY 2021-22, their PLF is 0%, 39.45% and 36.98% respectively. PLF of WYC Hydel is 44.44% in FY 2020-21 and 43.85% in first half of FY 2021-22. Further, as per proviso of Regulation 5.5 of the HERC MYT Regulations, 2019, the Commission may determine the tariff for hydro power projects up to 25 MW separately as per norms specified in the HERC RE Tariff Regulations in vogue, wherein CUF for small hydro projects shall be 56%.

In view of foregoing discussions, the Commission approves NAPAF for FY 2022-23 for PTPS 6, 7 & 8 as 55%, each keeping in mind that they may be scheduled during four to six months of peak demand period and for other units as proposed by HPGCL in line with the HERC MYT Regulations, 2019, as per following table:

S.N	Unit #	Approved	Prop	oosed	Approved
		FY 21-22	FY21-22	FY 22-23	FY 22-23
1	PTPS 6	00.00%	35.00%	85.00%	55.0%
2	PTPS 7	53.00%	85.00%	85.00%	55.0%
3	PTPS 8	53.00%	85.00%	85.00%	55.0%
4	DCRTPP 1	85.00%	85.00%	85.00%	85.0%
5	DCRTPP 2	85.00%	85.00%	85.00%	85.0%
6	RGTPP 1	85.00%	85.00%	85.00%	85.0%
7	RGTPP 2	85.00%	85.00%	85.00%	85.0%
8	WYC Hydel	56.00%	56.00%	43.00%	43.0%

Specific Oil Consumption / Secondary Fuel Consumption (SFC)

The Table below presents the trend in specific oil consumption as filed by the Petitioner: -

Historical Unit wise Specific Oil Consumption (in ml/kwh)

Unit	2018-19	2019-20	2020-21	2021-22 (up to Sept)	Avg. Of Last 3 FY	
PTPS-6	1.77	0.00	5.17	-	3.47	
PTPS 7	0.62	0.60	0.96	0.77	0.73	
PTPS-8	0.36	0.43	0.92	0.53	0.57	
DCRTPP-1	0.92	0.26	0.28	0.13	0.49	
DCRTPP-2	0.25	0.55	0.37	0.20	0.39	
RGTPP-1	0.85	1.22	0.65	0.36	0.91	
RGTPP-2	0.46	0.84	1.70	0.00	1.00	

From the Specific Oil Consumption given above and the PLF read with number of start/stop operations, it reveals that oil consumption of the generating plant mainly depends upon its scheduling/PLF and the no. of start & stop operations the unit faces.

HPGCL has proposed the Secondary Fuel Consumption for FY 2021-22 & 2022-23 as per HERC MYT Regulations, 2019 which is tabulated below: -

SFC (ml/kWh) as proposed by HPGCL for FY 2020-21 and FY 2021-22

S. No	Unit #	Approved	Proposed		
		FY2021-22	FY 2021-22	FY 2022-23	
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	DCRTPPS1	0.50	0.50	0.50	
5	DCRTPS 2	0.50	0.50	0.50	
6	RGTPS 1	0.50	0.50	0.50	
7	RGTPS 2	0.50	0.50	0.50	

HPGCL has submitted that 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 and stop operations, the norms provided as per regulation for specific oil consumption is on lower side at current PLF/ loading of Units. HPGCL reserve its right to claim the deficit in respect of the Oil consumption at the time of true-up of FY 2021-22 as per Regulation 29 of MYT Regulation, 2019.

The Commission observes that the specific oil consumption of PTPS-6, PTPS-7, PTPS-8 and RGTPP-1 during FY 2020-21 has been on the higher side. The petitioner has attributed the higher Specific Oil consumption for its certain power plants due to low PLF as a result of to less scheduling and more nos. of start and stop operations. However, HPGCL has proposed the specific oil consumption for its power plants as per the MYT Regulations 2019, thus the Commission approves the same.

Auxiliary Energy Consumption

The table below shows the Historical unit wise Auxiliary Consumption:

Historical Unit wise Auxiliary Consumption

Unit	2018-19	2019-20	2020-21	2021-22 (up to Sept)
PTPS-6	8.13	*	9.69	*
PTPS 7	8.10	8.49	8.72	9.58
PTPS-8	7.98	8.41	8.54	9.07
DCRTPP-1	7.81	8.02	8.04	8.39
DCRTPP-2	7.89	8.10	7.70	8.08

Unit	2018-19	2019-20	2020-21	2021-22 (up to Sept)
RGTPP-1	5.84	6.49	5.48	5.71
RGTPP-2	5.84	5.48	5.64	

* remained under RSD on account of no demand from DISCOMs.

It is observed that HPGCL has proposed Auxiliary consumption for FY 2022-23 in line with the already approved for FY 2021-22 (except for PTPS Unit-6) by the Commission as tabulated below:

C No	112	Approved	Proposed		
S. No.	Unit #	FY 21-22	FY21-22	FY 22-23	
1	PTPS 6	9.00%	9.00%	10.00%	
2	PTPS 7	8.50%	8.50%	9.30%	
3	PTPS 8	8.50%	8.50%	9.30%	
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%	

HPGCL has submitted that as the PTPS Unit-5 & 6 were envisaged together and thus sharing some common auxiliaries. After the decommissioning of Unit-5, the Common auxiliaries are needed to be on bar for readiness of Unit 6. Thus, leads to higher auxiliary consumption for Unit 6. The Commission is requested to take note of the above and allow the auxiliary @10% for PTPS Unit-6. Further, the Commission is requested to increase the Auxiliary consumption of PTPS Units, where the tube mill is used, by 0.8% as provided by the CERC in its tariff regulations 2019, while providing the "Norms of Operation" under Chapter 12 at "Auxiliary Energy Consumption" has allowed as under:

"Provided that for thermal generating stations with induced draft cooling towers and where the tube mill is used, the norms shall be further increased by 0.5% and 0.8% respectively"

The Commission observes that HPGCL has proposed Auxiliary Consumption as per norms with the request to further relax the same for PTPS Unit 6 from 9% to 10 and PTPS Units 7 & 8 as 9.30% in place of 8.50%.

The Commission observes that the issue raised herein has already been considered by the Commission in its order dated 24.04.2020 (HERC/PRO 58 of 2019). Hence, the same is res-judicata as no new facts or any change in the underlying circumstances have been submitted by the petitioner herein. Needless to say, that HPGCL ought to improve upon its operating efficiencies at least up to the minimum level as provided in the MYT Regulations, 2019 which was notified after due deliberations with the stakeholders for the Control Period beginning the FY 2020-21.

Station Heat Rate (SHR)

HPGCL has provided the unit- wise trend in Station Heat Rate (SHR) as under: -

Historical Unit wise Station Heat Rate (in Kcal/kwh)

Unit	2018-19	2019-20	2020-21	2021-22 (up to Sept)
PTPS-6	2540	*	2537	*
PTPS 7	2473	2476	2476	2471
PTPS-8	2468	2471	2480	2478
DCRTPP-1	2327	2328	2341	2338
DCRTPP-2	2319	2333	2342	2340
RGTPP-1	2461	2476	2431	2400
RGTPP-2	2419	2442	2461	0

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

The Station Heat Rate for FY 2022-23 has been proposed as per norms specified in HERC MYT Regulations, 2019 is as under:

SHR (kCal/kWh) FY 2021-22 and FY 2022-23

S. No	SHR (kcal/kWh)	Approved	Prop	osed
		FY 2021-22	FY 2021-22	FY 2022-23
1	PTPS 6	2550	2550	2550
2	PTPS 7	2500	2500	2500
3	PTPS 8	2500	2500	2500
4	DCRTPS 1	2344	2344	2344
5	DCRTPS 2	2344	2344	2344
6	RGTPS 1	2387	2387	2387
7	RGTPS 2	2387	2387	2387

The Commission observes that HPGCL has been able to maintain SHR for the FY 2020-21 as per norms except for RGTPS units 1 & 2 wherein the SHR is slightly on the higher side. The Commission further observes that HPGCL has proposed SHR for its units at PTPS, DCRTPS and RGTPS as provided in the MYT Regulations 2019. The same is approved.

Gross Calorific Value (GCV) and Fuel (Coal & Oil)

The GCV and cost of coal and secondary fuel (oil) has been proposed for the FY 2022-23 as per the actual weighted average calorific value of coal for PTPS, DCRTPS and RGTPS during April to Sept. of FY 2021-22 as under: -

Gross Calorific Value and landed Coal Cost

Particulars	PTPS	DCRTPS	RGTPS
Gross Calorific Value of Coal (kcal/Kg)	3439	3207	3368
Average landed cost of Coal (Rs/MT)	4570	4448	4797

Gross Calorific Value & cost of Oil

Particulars	PTPS	DCRTPP	RGTPP
Gross Calorific Value of oil (kcal/KL)	9540	8994	9408
Average landed cost of oil (Rs/kL)	54451	51671	55456

In line with the above discussions, the table below provides a summary of the norms approved by the Commission for determination of HPGCL's Generation Tariff for the FY 2022-23.

Units	PLF	SHR	Aux. C	SFC	Coal Cost	Oil Cost (Rs /
	(%)	(Kcal/kWh)	(%)	(ML/kWh)	(Rs/MT) &	KL) & GCV
					GCV	(Kcal /Litre)
					(Kcal/kg)	
PTPS – 6	55.0%	2550	9.0	0.5	4570/3439	54451/9540
PTPS - 7	55.0%	2500	8.5	0.5	4570/3439	54451/9540
PTPS - 8	55.0%	2500	8.5	0.5	4570/3439	54451/9540
DCRTPS - 1	85.0%	2344	8.5	0.5	4448/3207	51671/8994
DCRTPS - 2	85.0%	2344	8.5	0.5	4448/3207	51671/8994
RGTPS - 1	85.0%	2387	6	0.5	4797/3368	55456/9408
RGTPS - 2	85.0%	2387	6	0.5	4797/3368	55456/9408
WYC HEP	43.00%	-	1	-	-	-

Resultantly, the Energy Charges / Variable Charges for the FY 2022-23 calculated on the basis of the approved parameters / cost (Unit Wise) is presented below in the table that follow:

Approved Energy Charges / Variable Charges for the FY 2022-23

Parameters	Unit	Derivation		PTPS		RG TPS		DCR	WYC	
			Unit 6	Unit 7	Unit 8	Unit 1	Unit 2	Unit 1	Unit 2	
Installed Capacity (MW)			210	250	250	600	600	300	300	62.4
Gross Generation	MU	A	1,011.78	1,204.50	1,204.50	4,467.60	4,467.60	2,233.80	2,233.80	235.05
PLF (%)			55.00	55.00	55.00	85.00	85.00	85.00	85.00	43
Auxiliary Energy Consumption	%		9.00%	8.50%	8.50%	6.00%	6.00%	8.50%	8.50%	1.00%
Generation (Ex-bus)	MU	A1	920.72	1102.12	1102.12	4199.54	4199.54	2043.93	2043.93	232.70
Station Heat Rate (SHR)	Kcal/kwh	В	2550	2500	2500	2387	2387	2344	2344	
Specific Oil Consumption	ml/kwh	С	1	0.5	0.5	0.5	0.5	0.5	0.5	
Gross Calorific Value of Oil	Kcal/litre	D	9540	9540	9540	9408	9408	8994	8994	
Gross Calorific Value of Coal	K.cal/Kg	Е	3439	3439	3439	3368	3368	3207	3207	NA
Overall Heat	G.cal	F=(A*B)	2580039	3011250	3011250	10664161	10664161	5236027	5236027	NA
Heat from Oil	G.cal	G=(A*C*D)/1000	9652	5745	5745	21016	21016	10045	10045	NA
Heat from Coal	G.cal	H= (F-G)	2570387	3005505	3005505	10643146	10643146	5225982	5225982	NA
Oil Consumption	KL	I=G*1000/D=A*C	1012	602	602	2234	2234	1117	1117	NA
Coal Consumption	MT	J=(H*1000/E)	747423	873947	873947	3160079	3160079	1629555	1629555	NA
Cost of Oil per KL	Rs/KL	K	54451	54451	54451	55456	55456	51671	51671	NA
Cost of Coal	Rs/MT	L	4570	4570	4570	4797	4797	4448	4448	NA
Total Cost of Oil #	Rs .Mln	M=(K*I)/10^6	55.09	32.79	32.79	123.88	123.88	57.71	57.71	NA
Total Cost of Coal	Rs.Mln	N=(J*L)/10^6	3415.72	3993.94	3993.94	15158.90	15158.90	7248.26	7248.26	NA
Total Fuel Cost	Rs.Mln	O=M+N	3470.81	4026.73	4026.73	15282.78	15282.78	7305.97	7305.97	NA
Fuel Cost/Kwh	Rs.	P=O/A1	3.77	3.65	3.65	3.64	3.64	3.57	3.57	NA

Approved Fixed Cost Computation FY 2022-23 (Rs. Million)

	PTPS -		PTPS -	RGTPS		DCR TPS			
EXPENSES	6	PTPS -7	8	1	RGTPS 2	1	DCR TPS 2	WYC	TOTAL
Operation &									
Maintenance									
(O&M))			
a) R&M									
Expenses	91.09	139.80	139.80	265.03	265.03	320.78	320.78	31.43	1573.74
b) A&G									
Expenses	16.68	21.43	21.43	46.12	46.12	30.59	30.59	6.26	219.21
c) Employees									
Cost (Excl.									
Employee cost of									
PTPS Units 1-5)	822.26	753.54	753.54	1079.67	1079.67	796.98	796.98	245.73	6328.36
Total O&M									
(a+b+c):	930.03	914.77	914.77	1390.82	1390.82	1148.35	1148.35	283.42	8121.32
Depreciation	4.60	265.00	274.50	1033.50	1031.90	279.00	282.30	77.40	3248.20
Interest &									
Finance	0.00	9.60	9.80	279.00	279.00	75.80	75.80	8.40	737.40
W/C Interest	71.90	81.86	81.93	262.70	262.70	134.80	134.80	6.61	1037.29
ROE @ 10%	156.84	219.00	219.05	497.37	495.65	252.13	252.08	19.41	2111.53
Fixed Cost	1163.37	1490.23	1500.04	3463.39	3460.07	1890.07	1893.32	395.24	15255.73

Note - 1: 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-à-vis norms will entail reduced expenditure on R&M and A&G. Thus, the Commission is of the considered view that the consumers ought not to be

- burdened with additional O&M expenses of the power plants that are intermittently scheduled.
- Note 2: Employees Cost of PTPS Units 1-4 (de-commissioned) Units have been reduced from the base year i.e. FY 2017-18 for the purpose of projections. Whereas, at this stage, Employees cost of PTPS Unit 5, has not been allowed.
- Note 3: RoE has been pegged at 10% taking a holistic view of the power sector in Haryana and its cascading impact on electricity tariff at the consumers end.
- Note 4 O&M has been escalated in @ 2.93%.
- Note-5 GCV of coal has been considered on (as received) basis.

Note-6 PTPS-6 PLF has been pegged at 55% in view of the Hon'ble APTEL's order regarding payment of fixed cost. However, the unit is expected, if at all to be scheduled during April-September months in view of surge in demand only.

HERC (COMPUTATION OF	WORKING	G CAPITAL	AND INTER	REST		7	
	FY 2022-23							
ITEMS	DERIVATION	PTPS	PT	PTPS		DCR TPS		
		Unit 6	Unit 7	Unit 8	Unit 1 & 2	(Unit 1 & 2)	WYC	TOTAL
Coal Stock	1 months	284.64	332.83	332.83	2526.48	1208.04	0	4684.83
Oil Stock	1 months	4.59	2.73	2.73	20.646	9.62	0	40.32
O&M Expenses	1 months	77.502	76.23	76.23	231.80	191.39	23.62	676.78
Maint. Spares	10%/7.5% of O&M	93.00	91.48	91.48	278.16	229.67	21.26	805.05
Receivables	1 month	386.18	459.75	460.56	3124.08	1532.95	32.94	5996.46
W/C Requirement		845.92	963.02	963.83	6181.18	3171.67	77.81	12203.43
Int (@ 8.50% (7+1.5)%		71.90	81.86	81.93	525.40	269.59	6.61	1037.29
Claimed by HPGCL @ 8.5		104.70	122.30	122.30	540.80	281.60	9.80	1181.50
(Rs. Million)		PTPS 6	PTPS 7	PTPS 8	RGTPS 1&:	DCR TPS	WYC	Total
Total Coal Cost		3416	3994	3994	30318	14497	0	56218
1 months Coal		285	333	333	2526	1208	0	4685
Total Oil Cost		55	33	33	248	115	0	484
1 months Oil		5	3	3	21	10	0	40
O&M Expenses		930	915	915	2782	2297	283	8121
1 mts O&M Expenses		78	76	76	231.80	191	24	677
Maint. Spares (%age)		0.10	0.10	0.10	0.10	0.10	0.075	
Maint. Spares		93	91	91	278.16	229.67	21	805
Rec Tot VC		3471	4027	4027	30566	14612	0	56702
1 mts VC		289	336	336	2547	1218	0	4725
1 mts FC		97	124	125	577	315	33	1271
Rec 1mt Fc+1 Vc		386	460	461	3124	1533	33	5610

The Working Capital and interest thereto have been computed in as per the provisions of the MYT Regulations, 2019. The rate of interest on the working capital requirement, as computed in the table above, has been considered @ of MCLR (7%) and a

margin of 150 basis point. Resultantly, the allowed rate of interest for the purpose of working out interest amount has been considered @ 8.50%. Further, it is reiterated that the interest on working capital approved in the order for the FY 2022-23, is the ceiling limit, which shall be subject to true-up to the extent of actual interest.

The ECR and FC approved by the Commission is summarized in the table below: -

TARIFF	PTPS-6	PTPS -7	PTPS - 8	RGTPS 1	RGTPS 2	DCR TPS 1	DCR TPS 2	WYC	TOTAL
Fuel Cost Rs/kWh	3.77	3.65	3.65	3.64	3.64	3.57	3.57	-	3.58
Fixed Cost									
Rs. Million)	1163.37	1490.23	1500.04	3463.39	3460.07	1890.07	1893.32	395.24	15255.73

The recovery of fixed charges to the extent determined above, by the Commission, for the FY 2022-23 shall be as per the provisions of the MYT Regulations, 2019. HPGCL shall recover full capacity charge at the Unit Wise normative annual plant availability factor specified by the Commission in the said regulations and the recovery of capacity charge below the level of target availability i.e. normative PLF shall be on pro-rata basis and further that no capacity charge shall be payable at zero availability.

Accordingly, HPGCL shall ensure that fixed charges recovered for any of its power plants for which fixed charges have been determined by the Commission in its present Order, during the year, do not exceed the fixed charges as determined by the Commission.

Further, in case of annual PLF of any unit, including deemed generation, is lower than the normative PLF given in the order, the recoverable annual fixed charges shall get reduced on pro-rata basis. In view of above, it is ordered that HPGCL shall recover monthly fixed charges in line with the provision of MYT Regulations, 2019, subject to the condition that total recovered fixed charges for a Unit up to the end of a month shall not be more than the admissible approved fixed charges for that Unit as worked out corresponding to the cumulative PLF (after including deemed generation) up to the end of that month. For example, at the end of 3rd month, if the deemed PLF is 80% and the normative PLF is 85%, the admissible approved fixed charges would be AFC/4 (0.80/ 0.85) where AFC are the approved annual fixed charges. In case cumulative PLF at the end of 3rd month is more than the normative PLF, the admissible approved fixed charges will be AFC/4.

Technical Minimum schedule for HPGCL's Power Plants other than PTPS is directed to be implemented in line with Central Generating Stations (CGS) for absorption of renewable energy (to meet RPO or even otherwise).

All other terms and conditions not explicitly dealt with in this order shall be as per the relevant provisions of the Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019.

The Generation Tariff approved for the FY 2022-23 shall be implemented w.e.f. 01.04.2022.

The present petition is accordingly disposed of.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 22nd February, 2022.

Date: 22.02.2022 Place: Panchkula (Naresh Sardana) Member (R.K. Pachnanda) Chairman