COMMISSION'S ORDER

ON

TRUE-UP FOR FY 2019-20, MID-YEAR PERFORMANCE REVIEW FOR FY 2020-21 AND DETERMINATION OF GENERATION TARIFF FOR THE FY 2021-22

Case No. HERC/PRO-76 of 2020

18th February, 2021

HARYANA ELECTRICITY REGULATORY COMMISSION

BAYS NO. 33-36, SECTOR-4, PANCHKULA-134112

https://herc.gov.in

List of Abbreviations

Abbreviation	Full Description
A&G	Administrative & General
AAD	Advance Against Depreciation
APC/AEC	Auxiliary Power/Energy Consumption
ARR	Aggregate Revenue Requirement
ATE/APTEL	Appellate Tribunal for Electricity
CAGR	Cumulative Average Growth Rate
CERC	Central Electricity Regulatory Commission
Cr.	Crore (1 Crore = 10 Million)
DCRTPS	Deen Bandhu Chotu Ram Thermal Power Station, Yamunanagar
DHBVN	Dakshin Haryana Bijli Vitran Nigam
DSI	Dry Sorbent injection
EA-2003	The Electricity Act 2003
FGD	Flue Gas Desulphurisation
FPA	Fuel Price Adjustment
FTPS	Faridabad Thermal Power Station
GCV	Gross Calorific Value
FY	Financial Year
GFA	Gross Fixed Assets
GoH	Government of Haryana
GoI	Government of India
HERC	Haryana Electricity Regulatory Commission
HPGCL	Haryana Power Generation Corporation Limited
IEGC	Indian Electricity Grid Code
Ind AS	Indian Accounting Standard
IoB	Indian Overseas Bank
MoC	Ministry of Coal, Government of India
MoEFCC	Ministry of Environment, Forest and Climate Change
MoP	Ministry of Power, Government of India
MU	Million Units
MYT	Multi Year Tariff

Abbreviation	Full Description
O&M	Operation & Maintenance
POC	Point of connection
PFC	Power Finance Corporation
PLF	Plant Load Factor
PNB	Punjab National Bank
PPA	Power Purchase Agreement
PTPS	Panipat Thermal Power Station
REC	Rural Electrical Corporation
RGTPS	Rajiv Gandhi Thermal Power Station, Hissar
R&M	Repair & Maintenance
SBI	State Bank of India
SCE	Shift Charge Engineer
SCR	Systematic Catalytic Reduction
SFOC	Secondary Fuel Oil Consumption
SHR	Station Heat Rate
SLDC	State Load Dispatch Centre
SNCR	Systematic Non-Catalytic Reduction
SOFA	Secondary Over Fire Air
SPM	Suspended Particular Matter
STP	Sewage Treatment Plant
TO	Tariff Order
UHBVN	Uttar Haryana Bijli Vitran Nigam Limited
WYC	Western Yamuna Canal

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

Case No. HERC/PRO-76 of 2020

Date of Hearing	**:**	**21.01.2021**
Date of Order	**:**	**18.02.2021**

QUORUM

Shri Pravindra Singh Chauhan,	**Member (In Chair)**
Shri Naresh Sardana,	**Member**

INTHE MATTER OF

Petition filed by Haryana Power Generation Corporation Ltd. (HPGCL) for approval of True-up for the FY 2019-20, Mid-Year Performance Review for the FY 2020-21 and Determination of Generation Tariff for the FY 2021-2022.

AND

IN THE MATTER OF

HPGCL, Panchkula …… Petitioner

Present

1. Shri Shashank Anand, MD, UHBVNL.
2. Shri Umesh Kumar Aggarwal, CE, Regulatory Affairs HPGCL.
3. Shri Narender Singh, Chief Engineer (SO), UHBVNL
4. Shri Amit Diwan, Director (Finance), UHBVNL
5. Shri Rajiv Verma SE, HPGCL.
6. Shri Ravi Juneja, AEE, HPGCL
7. Shri Gaurav Gupta, Xen, HPPC

ORDER

1 The Petitioner herein i.e. HPGCL, vide its Memo No. 112/HPGC/Reg-515 dated 26.11.2020, has filed the present petition for approval of true-up for the FY 2019-20, and determination of Generation Tariff for the FY 2021-22 under Section 61 and 62 of Electricity Act, 2003 read with the MYT Regulations, 2019. Further, 'true-up' of various expenses for the FY 2019-20 has been proposed as per the applicable Regulations i.e. HERC MYT Regulation, 2012.

2 In order to afford an opportunity to the general public / Stakeholders to study / analyze the proposal and 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. The requisite public notice was inserted by HPGCL in the following Newspapers for inviting objections.

Name	Language	Date of publication
The Indian Express	English	28.11.2020
Amar Ujala	Hindi	28.11.2020

3 Petition filed by HPGCL

3.1 Force Majeure of RGTPP – Unit 1

HPGCL has submitted that overhauling of RGTPP-1 got delayed by 67 days (Overhauling start date: 16.12.2019, Schedule date of completion and on bar: 28.02.2020, actual date of completion: 05.05.2020, delay in availability of plant: 67 days i.e. from 28.02.2020 to 05.05.2020) which may be treated as "force majeure" due to COVID-19. Hence, relief may be allowed as per the relevant regulations occupying the field.

3.2 Merit Order Scheduling (MoD)

On the issue of MoD as it exists, HPGCL has prayed that the Commission may pass appropriate Orders and directions to the Haryana DISCOMs to evolve a fair, rational and equitable methodology for considering the merit order dispatch i.e. by giving due weightage to the oil cost, Point of Connection (PoC) charges and losses while comparing the variable cost of HPGCL with their other power suppliers to ensure level playing field to the State Generator vis-à-vis the Inter-State Generators. In support of their contention a study conducted through M/s 50 Hertz was placed on record.

3.3 Coal Penalties on account of short Lifting of Coal and its impact under MoD:-

HPGCL has apprehended that during first half 2020-21 on account of less scheduling given by Discoms, it has to bear the liability in terms of the penalty on account of Short lifting of coal to the tune of Rs 462 Crore (excluding taxes) approximately and the same may be considered by deciding Merit Order Despatch. The computational details were provided by the petitioner.

3.4 Western Yamuna Canal Hydel Project- Consideration under RE Regulation

HPGCL has submitted that WYC Hydel Projects falls under the small hydro project category covered under HERC RE Regulations. As per HERC RE Regulations, the energy generated beyond CUF has been allowed to book under the same tariff evaluated by

Commission, whereas in the HERC MYT Regulations, 2012, no incentive has been provided to HPGCL in the matter as extended to other RE Hydro Generators of the State for excess generation. HPGCL has submitted that same tariff may be allowed for the excess energy generated beyond the allowed CUF.

3.5 Deviation Settlement Mechanism (DSM):

HPGCL has submitted that the Commission vide its order dated 29.04.2019, has proposed to implement the DSM for the Haryana State. HVPNL vide its letter dated 16.07.2020 has forwarded the proposed procedure in the matter. HVPNL has placed the ABT meters on the outgoing feeders of the plants, thus the DSM to be implemented is on the plant basis not on the Units basis. This creates an ambiguity as per the prevailing MYT Regulations Units are considered as separate entity. The Commission is requested to consider the same and relax the norms under Regulation 78 &79 of MYT and consider the station of HPGCL as a "plant".

3.6 Teething problem being faced on account of frequent load variation at RGTPP-2.

HPGCL has submitted that due to frequent start/stop operation and variation in load profile of RGTPP-2, high vibration issue has been propped up which lead to increase in eccentricity of the Rotor and in turn boxing up of unit w.e.f 19.09.2020 for carrying necessary repairs in the rotor. In case the same may not be able to correct at plant, the rotor is required to shift to OEM premises. The OEM has categorically intimated that the RGTPP was designed as base load plant and further advice to run on the constant loads.

3.7 New Environmental Norms – Status of installation of Flue Gas De-Spherization (FGD) Plant and other pollution control equipment's: -

It has been submitted that the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India, notified the Environment (Protection) Amendment Rules, 2015 (Amendment Rules, 2015) on 7.12.2015 and 19.10.2020 amending/introducing the standards for emission of environmental pollutants to be followed by the Thermal Power Plants. Central Pollution Control Board (CPCB) vide letter dated 16.10.2020 issued the following schedule for installation of Flue Gas Desulphurization (FGD) in a phased manner in respect of HPGCL Plants: -

Name of Plant	Unit	Time Schedule
PTPS	Unit -6	April 2021
	Unit -7	Feb 2021
	Unit -8	Dec 2020
DCRTPP	Unit -1	Dec 2021
	Unit -2	Oct 2021
RGTPP	Unit -1	April 2022
	Unit -2	Feb 2022

The CAPEX in respect of implementation of the stringent New Environmental norms is yet to be finalised after opting the best suitable option. HPGCL has already initiated the process for finalising the same after the in-principle approval accorded by the Commission. HPGCL will approach the 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

HPGCL has indicated that capital expenditure, (exclusive of IDC & IEDC) amounting to Rs. 1192.26 Crore shall be incurred on installation of FGD and other pollution control equipment during the period FY 2020-21 to 2023-24.

3.8 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. 07/HPGCL/Reg.-515 dated 11.01.2021. The additional submissions of the Petitioner, in response to the Commission's Memo No. HERC / Tariff / 4269 dated 23.12.2020 has been taken on record.

4 True-up Petition for the FY 2019-20

HPGCL has submitted the petition for truing-up for the FY 2019-20 based on the Audited Accounts for the FY 2019-20 in accordance with the regulation 13.1 of the MYT Regulations, 2012. The expenses wise proposed true-up is presented below: -

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

The Petitioner has submitted the O&M Expenses, as per audited accounts for the FY 2019-20, is Rs. 849.30 Crore (net of solar business of Rs 0.52 Crore) as against the HERC approved O&M Expenses of Rs. 697.17 Crore. Further, out of approved O&M expenses of Rs. 697.17 Crore, expenses amounting to Rs. 625.66 Crore has only been recovered on account of "Force Majeure" submitted earlier. The additional expenditure on account of power drawn from Grid when the plant is not on bar has been considered under R&M head amounting to Rs. 19.46 Cr. as additional Auxiliary consumption. Thus, total O&M expenses amounting to Rs. 868.76 Crore (Rs. 849.30 Crore + Rs. 19.46 Crore) has been claimed by HPGCL primarily on account of uncontrollable expenses i.e. terminal liabilities included in the employees' cost & Force majeure event.

It has been submitted that the actual employee cost including terminal liability as per the audited accounts for the FY 2019-20 is Rs. 641.36 as against the approved Employee cost, included in the O&M expenses, of Rs. 447.52 Cr. only. The approved Employees cost considered by Commission in the O&M expenses for FY 2019-20 was based upon the actual audited expenses of the base year the FY 2015-16 with an escalation rate of 4% per annum only. Despite the fact that during the year under consideration the number of employees has not increased. However, due to increasing rate of retirement and implementation of the 7th Pay Commission for the existing employees, terminal liabilities of the HPGCL has increased significantly. As per the actuarial valuation report carried out by independent actuary firm M/s Trans Value Consultant, the terminal liabilities of HPGCL for the FY 2019-20 has been estimated at Rs. 356.68 Cr. Further, it has been submitted that HPGCL is bound by the Rules and Regulations of State Government pertaining to employee's benefits (pay structure, D.A., annual increment). Any revision, therefore, in the pay structure of its employees is beyond the control of the HPGCL.

That O&M expenses other than Employees Cost i.e. R&M and A&G expenses approved by the Commission for FY 2019-20 were Rs. 227.39 cr. and 22.26 cr. The actual R&M and A&G expense for the year remained at Rs. 202.32 cr. and 25.08 respectively.

4.1.1 Actuarial Valuation

That HPGCL has preferred an appeal against the Commission's Order dated 24.04.2020 (PRO 58 of 2019) vide DFR No 216 of 2020 at Hon'ble APTEL. For the period in consideration i.e. FY 2019-20, HPGCL has appointed M/s Trans Value Consultant, New Mumbai as independent valuer for the valuation for FY-2019-20. It is further submitted that valuation of the actuary is based on the given data and circumstances/ scenario and other market conditions for investment. HPGCL is having two employee welfare trusts namely HPGCL Employees Pension Fund Trust and HPGCL Employees Provident Fund Trust. Retirement benefit like Pension/ Gratuity Leave encashment and Commutation is being paid by HPGCL through its HPGCL Employees Pension Fund trust. Trust makes the investment of the funds contributed by HPGCL based on the valuation of Actuary report according to Ministry of Finance, GOI, Department of Finance O/o no F.no.11/14/2013 dated 02.03.2015.

Actuary valuation is based on the various data like employees count/ average age of active employees/ number of pensioners/ average age of pensioners /monthly salary eligible for LTC (active employees &pensioners). Besides this information Actuary also considers Discount rate/salary escalation rate/ Attrition rate/ Withdrawal rate/ Mortality rate etc. Based on all the above information an Actuary gives its report contribution to Trust for safeguard the interest of the employees of HPGCL after retirement. Terminal liability is an uncontrollable expenditure under Regulation 8.3(b) and the same is being allowed by the Commission with the True-up of respective year. The Commission vide its order dated 24.04.2020 has directed to stagger the terminal liability. However, HPGCL has submitted that from Income Tax point of view, HPGCL's contribution to retrial benefits is deductible only on payment basis. If payment is deferred, HPGCL will not be in position to claim this expense in its Income Tax return as per Section 43B of Income Tax Act, certain expenses are allowed to be deducted only on payment basis and contribution to trust for welfare of employee is well covered in section 43B. The actuarial valuation determines the defined asset of the trust as on 31st March of the year. Any shortfall in asset valuation as valued by Actuary when compared with actual value of the trust has to be filled in by the Company. Any delay in part of company to fill the gap / shortfall will result in higher valuation by actuary for next year.

4.1.2 Reserve Shut Down (RSD)

HPGCL has submitted that its units are under Reserve Shut Down (RSD) and forced to consume Additional Auxiliary Consumption (AAC) from the grid for readiness of the plants, the same is being paid to Discoms at the normative price of the Units for no demand months. Further, when the Units are at bar for certain durations in the month, then the net generations are charged by way of ECR in the month after adjusting the energy consumed from the grid resultant to additional financial burden on HPGCL by adjusting AAC in the matter. The Commission should acknowledge that under RSD, the Additional Auxiliary Consumption (AAC) is the need of the plant and the expense of the same is beyond controllable for any generator. The same needs to either be consider pass through or allowed to recover under the O&M cost. It has been learnt that NTPC and other units doesn't claim the additional auxiliary consumption for the duration of RSD, as the same is being adjusted under O&M or other appropriate head where the margins against the normative is available. For FY- 2019-20, the liability on account of AAC for HPGCL is of the tune of Rs 19.46

Crore, which is required to be passed through under appropriate head where the margin is available, as there is no other income source for HPGCL to adjust the same. It is also the matter of the fact, if the normative cost of the R&M be made to HPGCL, then said expenditure be recovered under R&M, thus no additional cost needs to be sought under True up by HPGCL. The Commission in its order dated 24.04.2020 has allowed the said cost last time for FY 2018-19, But HPGCL has no other options except to consider/ claim the same under R&M, as there is no other source/ head is available where the said cost can be booked. Thus, HPGCL has no option except to seek the said additional burden of power withdrawn from Grid to keep plants available through R&M. Therefore, the Commission is requested to take note of the same and allow the said expenditure of Rs 19.46 Crore under R&M.

The Petitioner has prayed that the Commission may allow the true up of the O&M cost amounting to Rs. 243.10 Cr. only i.e. the difference between the recovered and actual O&M cost for the FY 2019-20 net of savings on account of R&M expenses.

4.2 True-up of Depreciation

That the Commission, as per its Order dated 07.03.2019, had approved depreciation of Rs. 399.14 Crores. The actual depreciation of HPGCL in the FY 2019-20, as per audited accounts is Rs. 388.31 Crores (net of solar business of Rs. 385.03 Crores).

The variation in the approved depreciation and net allowable depreciation for the FY 2019-20 is presented below: -

Rs. Crore

S. No	Unit	Approved	Actual as per audited accounts*	Dep. on GAAP Spares	Dep. on account of Ind AS	Net allowable dep.	Recovered Dep.	Variance
A	B	C	D	E	F	G=(D-E-F)	H	I=(G-H)
1	PTPS-5-6	1.82	1.857	0.082	1.309	0.466	1.82	-1.35
2	PTPS-7-8	62.63	57.72	0.472	5.007	52.241	62.63	-10.39
3	DCRTPP	109.18	108.86	1.44	2.284	105.136	96.91	8.23
4	RGTPP	206.98	211.35	3.987	3.835	203.528	180.45	23.08
5	Hydel	18.53	5.234	0	0	5.234	18.53	-13.3
	Total	**399.14**	**385.021**	**5.981**	**12.435**	**366.605**	**360.34**	**6.26**

* Excluding Solar Business of Rs. 3.28 Cr.

Depreciation for FY 2019-20 on account of capitalization of spares and Decommissioning Cost in accordance to the Ind AS, is Rs.18.42 Cr. (5.98+12.44). Net allowable Depreciation for FY 2019-20 exclusive of Solar business and depreciation on spares and Decommissioning Cost in accordance to the Ind AS is Rs. 366.61 Cr (388.31-3.28-18.42).

In view of the above, HPGCL has prayed to approve difference of Rs 6.26 Cr. as true-up of depreciation for FY 2019-20.

4.3 True-up of Interest Expenses

The Petitioner has submitted that as against the interest and finance charges on loan of Rs. 185.22 Crore approved by the Commission for the FY 2019-20, the actual amount incurred, as per the audited accounts, is Rs. 105.23 Crore (net of Solar Business of Rs. 102.31 Crore).

HPGCL 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 2019-20 as per pre-restructuring Loan portfolio excluding solar business is given below: -

Pre-Restructuring Loan Portfolio &Repayments schedule for FY 2019-20 (Rs. Cr.)

Particulars	Rate of Interest	Opening Bal	Drawls during the year	Repayments during the year	Closing Balance	Interest during the year
GPF Bonds	8.65%	47.47	0	6.78	40.69	3.53
SBI DCRTPP YNR	12.50%	633.3	0	120.64	512.66	71.62
REC	11.45%	577.24	0	75.6	501.64	66.08
State Bank of India(RGTPP)	11.45%	641.58	0	65.08	576.5	69.74
APDP Loan	12.50%	3.26	0	0.15	3.11	0.4
Punjab National Bank (Andhra Takeover)	8.65%	41.05	0	20	21.05	2.68
Punjab National Bank (Andhra Takeover Hisar)	8.65%	95.4	0	38	57.4	6.61
Punjab National Bank	12.25%	143.29	0	20.52	122.77	16.3
Total		**2182.59**	**0**	**390.19**	**1835.82**	**236.96**

Actual Loan Portfolio and Int. & Fin. Charges for FY 2019-20 (Rs. Cr.)

Particulars	Rate of Interest (%)	Opening Bal	Additions during the year	Repayments during the year	Closing Balance	Interest during the year
GPF Bonds	8.00	47.47	-	6.78	40.69	3.22
SBI (DCRTPP)	9.05	273.28	-	273.28	0	9.08
REC	9.20	529.13	-	75.6	453.53	45.93
SBI(RGTPP)	9.05	138.39	-	138.39	0	4.67
APDP Loan	12.50	3.26	-	0.15	3.11	0.41

PNB(Andhra Takeover)	8.50	42.42	-	20.22	22.2	2.94
PNB(Andhra Takeover, Hisar)	8.50	95.37	-	38.44	56.93	6.83
PNB Loan	8.50	144.59	-	20.89	123.7	11.55
PNB (SBI takeover)	8.50	281.69	-	260.55	21.14	17.68
Total		**1555.6**	**0**	**834.3**	**721.3**	**102.31**

HPGCL further submitted that as per MYT Regulations, the Commission may allow to retain 60% of the savings, however, in its earlier orders has considered to pass on 50% of the net savings to the beneficiaries, accordingly, HPGCL is proposing to pass on 50% of the savings on interest and finance charges to the beneficiaries and consider the true up of interest and finance charges as given in the below table:

Particular	Approved interest & Finance Charges	Actual interest & Finance Charges	Pre-restructuring interest & Finance Charges	Allowable interest & Finance charges	True-up
1	2	3	4	5=3+50 % (4-3)	6=5-2
Int.& Fin. Charges (A)	185.22	102.31	236.94	169.63	6.665
Int. On Normative Debt(B)	0	0	0	0.23	0.23
Total True up of Int.& Fin. Charges(A+B)	**185.22**	**102.31**	**236.94**	**169.86**	**6.895**

HPGCL therefore, has requested to allow Rs 6.895 Cr. as pass through of Interest & Finance charges.

4.4 True-up of Return on Equity

HPGCL has submitted that the Commission had approved RoE of 10% Pre-tax amounting to Rs. 210.95 crore, for the FY 2019-20. The Opening equity for FY 2019-20 has taken as closing equity of FY 2018-19 as approved by the Commission in its tariff order dated 24.04.2020. Equity addition amounting to Rs. 12.49 Cr. has been made to the opening equity in order to arrive at the closing equity of FY 2019-20. The details of opening equity, equity addition and required return of equity considered unit-wise is summarized in the table below: -

Rs. Crore

Plants	Opening	Additions	Closing	RoE (@ 10%)
PTPS – 5	5.08	-	5.08	0.51
PTPS – 6	156.77	-	156.77	15.68
PTPS – 7	218.04	-	218.04	21.8
PTPS – 8	218.02	-	218.02	21.8
DCRTPP-1	247.63	3.135	250.765	24.92

DCRTPP-2	247.58	3.135	250.715	24.91
RGTPP-1	491.8	1.574	493.374	49.26
RGTPP-2	491.24	1.573	492.813	49.2
Hydel	15.27	3.075	18.345	1.68
Total	**2,091.43**	**12.492**	**2103.922**	**209.77**

Approved RoE(A)	Actual RoE(B)	Recovered RoE(C)	True-up of RoE Cost(B-C)
210.95	209.77	192.45	17.32

Hence, HPGCL has prayed that additional RoE for the FY 2019-20 amounting to Rs. 17.32 crore may be considered for truing- up.

4.5 True-up of recovery of cost of Oil

HPGCL submitted that in FY 2019-20, it had incurred oil expense amounting to Rs. 22.62 Crore, which was considerably lower than the approved amount of Rs. 97.63 Crore. The prime reason for low oil consumption is better operational performance of HPGCL despite frequent start-stop operation on instructions of Discoms/SLDC. HPGCL propose to pass on 100% of the saving due to low generation and 50% of the saving due to low SFC amounting Rs. 37.60 Crore (Rs. 37.41+0.15+0.04 Cr.), to the Discoms. Hence, HPGCL has requested to approve true-up of Rs. 37.60 cr. (pass on to beneficiary) on account of oil cost for FY 2019-20.

4.6 True up of interest on working capital

HPGCL submitted that the Commission in its Order dated 07.03.2019 regarding generation tariff for FY 2019-20 had projected average coal and oil prices at prevailing market prices. However, there has been variation in prices of coal and oil during the FY 2019-20. Therefore, while computing the truing-up of working capital FY 2019-20, actual rate of coal and oil prevailing in FY 2019-20 has been considered.

Due to variation in the Fuel prices the normative working capital requirement for FY 2019-20, as per the approved norms of the HERC, has increased to Rs. 1869.97 Cr against the approved working capital requirement of Rs. 1767.29 cr. and consequently, Interest on working capital requirement has also increased to Rs. 183.25 cr. (@ 9.8%) against the approved interest on working capital requirement of Rs. 175.85 cr. (@9.95%).

HERC has approved the Interest on Working Capital @ 9.95% (8.70%+1.25%). Actual SBI Base Rate as on 01.04.2019 was also 8.55%, as such there is slightly change in the allowable rate of interest on working capital @ 9.80% which is liable to be pass through under the True-up. The table below summarizes True-up of interest on working capital for FY 2019-20.

Particular	**Approved IWC (Rs. Cr.) @ 9.95% (A)**	**Normative IWC (Rs. Cr.) @ 9.80% (B)**	**Recovered IWC (C)**	**True-up Rs. Cr. D=B-C**
Interest on working capital	175.85	183.25	157.57	25.68

HPGCL has requested to allow the difference of Rs 25.68 Cr. as true-up of interest on working capital for FY 2019-20.

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 2019-20 is as under:

Non-operating income for FY 2019-20 (Rs. Cr.)

Particulars		Amount (Rs. in crore)
Income from sale of scrap		1.97
Income from staff loans and advances		0.56
Income from FD with bank company etc		0.50
Delay Payment charges		0.01
Penalties recovered from contractors	3.70	6.97
Rental from the contractors	0.85	
Others	2.42	
Total		**9.99**

HPGCL submits that the income on account of penalty charges and rental from the contractors relates to the contractual obligation with the contractor and saving relates to main business of HPGCL as per Regulation 12 of MYT, 2012. HPGCL requested to allow the total retention of Rs. 3.345 Cr (Rs 2.275Cr (50% of 3.70+0.85) along with the income from staff loans and advances etc. amounting to Rs 1.07Cr [0.56+0.50+0.01]).

In view of the above HPGCL proposes true up of the other non-operating income amounting to Rs. 6.645 Crore, for reducing from the true up for FY 2019-20 as under:

Net True-up after reducing the other non-operating income is given as under:

Particulars	Amount (Rs. in crore)
Total True amount as summarized below	261.655
Less: Non-operating income	6.645
Net True up	**255.010**

4.8 Total True-up for the FY 2019-20

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

(Rs. Crore)

O&M Expenses	Depreciation	Oil Expense	IWC	Interest & Fin. Charges	RoE	Non-Tariff Income	Total True-up (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 for six months for the year in which the same accrued and for twelve months of the current year i.e. FY 2020-21. Additionally, it has been prayed that the carrying cost may further be allowed if recovery of the True-up amount is staggered beyond 1st April, 2021.

5 Review of Capital Expenditure

5.1 HPGCL has submitted that the Commission, in its Order dated 24.04.2020 has disposed of HPGCL petition PRO 12 of 2020 with the directives regarding financial progress of Capex approved by the Commission including any work wise deviation from the same. Accordingly, the Capital Investment Plan of HPGCL was as under:-

Capital Investment Plan

S No	Capital Expenditure Work	(Rs. Cr.)					
	Year	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
1	Capital Overhauling at WYC	8.00	3.50	-	-	-	-
2	ERP System and allied works	9.50	12.71	2.6	10.19	-	-
3	Balance Payment to R-Infra against EPC contract for RGTPP, Hisar	-	6.70	2.73	-	-	-
4	Procurement of PA fan blades for RGTPP Hisar	0.80	-	-	-	-	-
5	Procurement of 2 No. Air Driers for Transport Compressors for RGTPP Hisar	-	-	0.75	-	-	-
6	Trunion Bearing Housing and adopter sleeves support and guide side of APH for RGTPP Hisar	-	-	2.00	-	-	-
7	Arrangement of Dust Suppression system at ash dyke for RGTPP Hisar	-	-	4.50	-	-	-
8	Construction of 2 no. Barracks for CISF for RGTPP Hisar	-	1.28	-	-	-	-
9	Installation of CCTV surveillance System in RGTPP Hisar	-	2.00	-	-	-	-
10	Construction of DAV school in power plant colony for RGTPS Hisar	-	2.0	4.87	-	-	-
11	Revival of Fire Fighting System of Unit6, PTPS, Panipat	-	-	0.60		-	-
12	Replacement of PTPS Unit-6 AD Line in Ash Handling & repair D2 of ESP Field	0.50	-	-	-	-	-
13	Replacement of damaged floor and Construction of Roads in PTPS Colony, Panipat as per new norms of	-	0.80	0.75	-	-	-

S No	Capital Expenditure Work	(Rs. Cr.)					
	Year	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
	Government of Haryana						
14	Up-gradation of PTPS Unit-6 HMI System of pro-control supplied by M/s BHEL	-	-	1.50	-	-	-
15	Energy Management System PTPS Unit- 7-8	-	-	0.70	-	-	-
16	Up gradation of existing DCS system for DCRTPP 1 & 2	-	4.00	-	-	-	-
17	Revival of 20 no ESP fields and repairing of balance 36 no. ESP fields of Unit- 2 DCRTPP Yamunanagar	19.00	-	-	-	-	-
18	Providing of 2 No. VFD on Unit-1 DCRTPP, 6.6KV Motor of CEP	2.30	-	-	-	-	-
19	Township for DCRTPP, Yamunanagar	-	-	2.36	-	-	-
20	Civil Works for WYC Hydel Project	2.25	-	-	-	-	-
21	Revival of 02 Nos of ESP fields of RGTPP Unit I	5.0	4.04	-	-	-	-
22	Supply, Erection, Testing and Commissioning of Energy Management System at 2x600 MW RGTPP, Khedar, Hisar	0.32	0.23	-	-	-	-
23	Modernization of Boiler Lift for PTPS Unit 8	-	0.55	-	-	-	-
24	Replacement of DAVR in DCRTPP Units 1 &2	1.50	-	-	-	-	-
25	Providing of 2 No. VFD on Unit-II DCRTPP ,6.6KV Motor of CEP	-	-	2.36	-	-	-
26	Improvement work of Cooling Towers of RGTPP Unit I & II	5.0	-	6.0	-	-	-
27	Installation of Variable Frequency Drive in Condensate Extraction Pump (CEP) of RGTPP Unit I & II	-	5.21	-	-	-	-
28	Replacement of 2 Nos. Stator of BCP of RGTPP Unit I & II	2.05	3.15	-	-	-	-
29	Upgradation of C&I system for RGTPP Hisar	1.50	1.50	4.00	4.00	-	-
30	Up-gradation of existing PLC & SCADA at DCRTPP	-	-	2.25	-	-	-
31	Procurement of ID fan blades,RGTPP	-	1.68	-	-	-	-
32	Data Center, Data Recovery centre etc. for ERP Solution	2.00	8.00	5.00	5.00	-	-
33	Replacement of 03 Nos. Fire Tenders at RGTPP				1.20		
34	Upgradation of hardware and software of PLC at RGTPP, Khedar, Hisar	-	-	2.70	1.90	1.20	1.20
35	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	-	-	-	-
36	Procurement of Complete Battery Banks Lead Acid Plante 220V, 2140AH in each Unit (Unit 1&2), RGTPP, Khedar, Hisar	-	3.80	-	-	-	-
37	Work for Supply, Erection, Testing and Commissioning of 02 Nos. ABB make	-	-	-	0.51	0.51	-

S No	Capital Expenditure Work	(Rs. Cr.)					
	Year	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
	unitrol-6080 Digital Automatic Voltage Regulator (DAVR) for Generator Excitation System and replacement with existing ABB make Unitrol-F DAVR at RGTPP, Khedar, Hisar						
38	Construction of First Aid Centre and additional RCC Roof slab of DG Set house at RGTPP, Khedar, Hisar	-	0.55	-	-	-	-
39	Purchase of Ion Chromatography system fully automatic PC based	-	0.65	-	-	-	-
40	Refurbishment of BFP Cartridge: DCRTPP,Yamuna Nagar	-	1.60	-	-	-	-
41	Purchase of 01 no. Runner Hub without blades and new set of guide vanes	-	-	-	7.00	-	-
42	Replacement of 02 Nos. Fire Tenders at PTPS Panipat	-	0.40	0.40	-	-	-
43	Renovation of centralised AC System of Unit-7&8,PTPS Panipat	-	1.80		-	-	-
44	Providing rejected Coal (Pucca Floor under 132 KV & 220 KV Lines inside the plant boundary) PTPS, Panipat	-	0.50	-	-	-	-
45	Construction of all weather patrolling track along the peripheral boundary wall at PTPS, Panipat	-	0.50	-	-	-	-
46	Replacement of 8" water lines around the circular road in PTPS, Colony	-	0.50	-	-	-	-
	Total	59.72	68.25	46.07	29.8	1.71	1.2
	Grand Total FY 2019-20 to FY 2024-25	206.75					

In this regard, HPGCL has submitted that there are certain variations in the actual CAPEX incurred vis-à-vis approved expenditure tabulated above is mainly due to revision in the overhauling schedule/ financial prudence and some of the schemes have been completed/surrendered in the FY 2019-20. Therefore, the revised schedule of capitalization of the rest of the capital works is presented for kind consideration and approval of the Commission, as under:-

Revised capital investment plan for FY 2020-21 to FY 2024-25

S No	Capital Expenditure Work	(Rs. Cr.)				
	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	-	-

S No	Capital Expenditure Work	(Rs. Cr.)				
	Year	2020-21	2021-22	2022-23	2023-24	2024-25
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	-	-
17	Up gradation of hardware and software of PLC at RGTPP, Khedar, Hisar	-	-	-	-	7.00
18	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	-	-	-	-
19	Procurement of Complete Battery Banks Lead Acid Plante 220V, 2140AH in each Unit (Unit 1&2), RGTPP, Khedar, Hisar	1.90	1.9	-	-	-
20	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	-
21	Construction of First Aid Centre and additional RCC Roof slab of DG Set house at RGTPP, Khedar, Hisar	-	0.55	-	-	-
22	Purchase of Ion Chromatography system fully automatic PC based, RGTPP Hisar	-	0.65	-	-	-
23	Revival of Fire Fighting System of Unit6, PTPS, Panipat	-	-	0.6	-	-
24	Replacement of damaged floor and Construction of Roads in PTPS Colony, Panipat as per new norms of Government of Haryana	-	1.55	-	-	-
25	Up-gradation of PTPS Unit-6 HMI System of pro-control supplied by M/s BHEL	-	-	1.5	-	-
26	Energy Management System PTPS Unit- 7-8	-	-	0.7	-	-
27	Modernization of Boiler Lift for PTPS Unit 8	-	-	0.55	-	-
28	Replacement of 02 Nos. Fire Tenders at PTPS Panipat	0.4	0.4	-	-	-
29	Renovation of centralised AC System of Unit-7&8, PTPS Panipat	-	-	1.8	-	-
30	Providing rejected Coal (Pucca Floor under 132 KV & 220 KV Lines inside the plant boundary) PTPS, Panipat	0.5	-	-	-	
31	Construction of all-weather patrolling track along the peripheral boundary wall at PTPS, Panipat	0.5	-	-	-	
32	Replacement of 8" water lines around the circular road in PTPS, Colony	0.5	-	-	-	-
33	Replacement of PTPS Unit-6 AD Line in Ash Handling & repair D2 of ESP Field	0.50				

S No	Capital Expenditure Work	(Rs. Cr.)				
	Year	2020-21	2021-22	2022-23	2023-24	2024-25
34	Up gradation of existing DCS system for DCRTPP 1 & 2	4	-	-	-	-
35	Township for DCRTPP, Yamunanagar	-	2.36	-	-	-
36	Providing of 2 No. VFD on Unit-II DCRTPP ,6.6KV Motor of CEP	-	2.36	-		-
37	Up-gradation of existing PLC & SCADA at DCRTPP	-	2.25	-	-	-
38	Refurbishment of BFP Cartridge: DCRTPP, Yamuna Nagar		1.6	-	-	-
39	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	146.77				

Completed/Dropped Schemes

Sr. No.	Capital Expenditure Work	Amount	Remarks
1	Trunion Bearing Housing and adopter sleeves support and guide side of APH for RGTPP Hisar	2.0	Requirement of material has been dropped.
2	Arrangement of Dust Suppression system at ash dyke for RGTPP Hisar	4.50	Dropped keeping in view the effectiveness of the planted Sarkanda at Ash Dyke
3	Revival of 20 no ESP fields and repairing of balance 36 no. ESP fields of Unit- 2 DCRTPP Yamunanagar	19.0	Completed
4	Providing of 2 No. VFD on Unit-1 DCRTPP, 6.6KV Motor of CEP	2.30	Completed
5	Civil Works for WYC Hydel Project	2.25	Completed
6	Supply, Erection, Testing and Commissioning of Energy Management System at 2x600 MW RGTPP, Khedar, Hisar	0.55	Completed
7	Replacement of DAVR in DCRTPP Units 1 &2	1.5	Completed

Note:

CAPEX in respect of New Environmental Norms: The CAPEX in respect of implementation of the stringent New Environmental norms is yet to be finalized after opting the best suitable option. HPGCL has already initiated the process for finalizing the same after the in-principle approval accorded by the Commission. HPGCL will approach the 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	2020-21	2021-22	2022-23	2023-24	Total
1	Installation of FGD RGTPP	-	291.42	233.13	58.28	582.83
2	Installation of FGD DCRTPP	-	217.18	173.74	43.44	434.36
3	Installation of FGD PTPS 6	-	25.11	2.8	-	27.91
4	Installation of FGD PTPS 7-8	-	59.80	6.65	-	66.45
5	Installation of Low NOx Burner &SOFA RGTPP	-	24.62	6.16	-	30.78
6	Installation of Low NOx Burner &SOFA DCRTPP	-	20.46	5.12	-	25.58
7	Installation of Low NOx Burner &SOFA PTPS 7-8	2.43	21.92	-	-	24.35

Installation/status of pollution control equipment:

HPGCL has submitted that following actions have been taken for the compliance of New Environment Norms: -

i) Specific Water Consumption:-

Specific Water consumption of all HPGCL plants is within limits. Efforts were made for the control of specific water consumption. Water balance studies were conducted in the past followed by plugging of the points of leakage of water & steam.

ii) SPM:-

a) PTPS: SPM are within limits. The installation of FGD system will further reduce the SPM level.

b) DCRTPP: - The work of revival of ESP fields of unit-1&2 has already been completed & SPM values are within the prescribed limits. The installation of FGD system will further reduce the SPM level.

c) RGTPP: - The work of revival of ESP fields of unit-1&2 has already been completed & SPM values are within the prescribed limits. The installation of FGD system will further reduce the SPM level.

iii) SOx:

a) NIT for all the Generating Stations were floated in 2019, but the Govt of Haryana has scrapped the present NIT for installation of FGD at HPGCL Units and directed to follow the motto of "Aatamnirbhar Bharat" and direct to amend the clauses of NIT to allow only participation from India based registered companies for participation as per practice followed by NTPC. Accordingly, the Govt. of Haryana has decided on 15.06.2020 for retendering and participation of only those companies which are registered in India similar to NTPC practice. Accordingly, the fresh NIT has been floated after taking administrative approval from Hon'ble Power Minister, on Domestic Competitive Bidding mode with latest NTPC qualification criteria with due date of opening in Novemeber,2020.

b) Additional raw material (lime stone) will be required in the FGD. FGD will also consume the additional power. As such Installation of FGD will also increase the O&M Expenses and Aux. Cons.

iv) NOx

a) The committee constituted by Ministry of Power (MoP) headed by Chairperson, CEA recommended to install Low NOx burners and Separated Over Fire Air (SOFA) Compartments to control NOx levels in Thermal Power Plants.

b) The principal approval for installation of Low NOx burners and Separated Over Fire Air (SOFA) Compartments to control NOx levels in HPGCL's Thermal Power Plants has already been approved in the Commission order dated 07.03.2019 in the case of HERC/PRO-59 of 2018.

c) It is expected that NOx will be controlled after installation of Low NOx burners and Separated Over Fire Air (SOFA) Compartments and HPGCL shall intimate if any additional equipment is required to control the NOx.

v) Mercury (Hg): -

Emission of Mercury (Hg) can be restricted as co-benefit through other pollution control equipment like ESP, FGD etc.

6 HPGCL's Proposed Technical Parameters

6.1 NAPAF (Normative Annual Plant Load Factor)

The Petitioner has proposed the NAPAF of its various power plants for the FY 2020-21 and FY 2021-22 in line with HERC MYT Regulation, 2019 as under: -

NAPAF for FY 2020-21 and FY 2021-22

S. N	Unit #	Approved	Proposed	
		FY 20-21	**FY-20-21**	**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%

S. N	Unit #	Approved	Proposed	
		FY 20-21	**FY-20-21**	**FY 21-22**
8	WYC Hydel	46.00%	46.00%	46.00%

6.2 Auxiliary Energy Consumption

HPGCL has proposed auxiliary consumption for the FY 2021-22 in line with the already approved for FY 2020-21 (except for PTPS Unit-6) by the Commission.

The auxiliary consumption approved by the Commission for FY 2020-21 and HPGCL proposed by FY 2021-22 are as under: -

S. N	Unit #	Approved	Proposed	
		FY20- 21	FY20- 21	FY 21-22
1	PTPS 6	9.00%	10.00%	10.00%
2	PTPS 7	8.50%	8.50%	8.50%
3	PTPS 8	8.50%	8.50%	8.50%
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 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 2020-21and FY 2021-22

S.N	Unit #	Approved	Proposed	
		FY 20- 21	FY 20-21	FY 21-22
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. Further, it is also added that HPGCL shall be allowed to recover the expenditure of excess oil consumption on account of higher Start Stop operations / low PLF beyond the limits specified in the Regulations on monthly basis through supplementary bills and the cost of the same should not be consider under the MoD being the compensation on account of higher Start Stop operations/ Low PLF. HPGCL reserve its right to claim the deficit in respect of the Specific Oil consumption at the time of true-up of 20-21.

6.4 Station Heat Rate (SHR)

The SHR for the FY 2021-22 is proposed by HPGCL as per norms specified in HERC MYT Regulation, 2019 is as under: -

S.N	SHR (kcal/kWh)	Approved	Proposed	
		FY 20-21	FY 20-21	FY 21-22
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 2021-22 as per the actual weighted average calorific value of coal/Oil for PTPS, DCRTPS and RGTPS during April to September of the FY 2020-21, as under: -

GCV & Coal Cost (FY 2021-22)

Particulars	PTPS	DCRTPS	RGTPS
Gross Calorific Value of Coal (kcal/Kg)	3577	3380	3388
Average landed cost of coal (Rs. /MT)	4548	4564	4905

GCV & Oil Cost (FY 2021-22)

Particulars	PTPS	DCRTPS	RGTPS
Gross Calorific Value of Oil (kcal/Kg)	10524	10312	10620
Average landed cost of Oil (Rs. /Kl)	38526	34358	36059

6.6 Energy Charges (ECR)

HPGCL has computed ECR as per Regulation 31C(ii) of the MYT Regulations, 2019. The same is re-produced below: -

HPGCL'S Computation of ECR (FY 2021-22)

	FY 2021-22	
Fuel Cost	**Generation (Ex-bus)**	**Per Unit Variable cost**
	in MU	Rs/ Unit
PTPS – 6	1407.29	3.630
PTPS – 7	1703.27	3.488
PTPS – 8	1703.27	3.488
DCRTPS 1	2043.93	3.470
DCRTPS 2	2043.93	3.470
RGTPS-1	4199.54	3.687
RGTPS-2	4199.54	3.687

7 Annual Fixed Cost

The Petitioner has submitted that the Commission has notified HERC MYT Regulations, 2019 for the Control Period of FY 2020-21 to FY 2024-25. Accordingly, various components of fixed cost for the FY 2021-22 have been proposed in line with HERC MYT Regulations, 2019 read with submission made in this Petition.

7.1 Operation and Maintenance Expenses (O&M)

It has been submitted that HPGCL has opted for an appeal at Hon'ble APTEL against the HERC order dated 24.04.2020 against the reduction of Employees Cost from the base year. HPGCL is claiming the Employees Cost as per Regulation; however, reserve 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 is proposing the O&M expense for the FY 2021-22 as per the methodology adopted by the Commission in HERC MYT Regulation, 2019 as follows: -

Sr. No.	Unit	Approved FY 20-21	Proposed FY 21- 22
1	PTPS -6	86.88	120.47
2	PTPS –7	100.517	133.64
3	PTPS –8	100.517	133.64
4	DCRTPS 1	107.275	144.64
5	DCRTPS -2	107.275	144.64
6	RGTPS 1	129.926	184.76
7	RGTPS 2	129.926	184.76
8	WYC Hydel	26.476	43.21
9	**Total**	**788.791**	**1089.76**

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 rate has been applied on the average of opening and closing asset at the rate notified in HERC, MYT Regulations, 2019. The depreciation claim is within the maximum allowable limit. Gross Fixed Assets is as per the Fixed Asset Register (FAR) of FY 2019-20 and closing GFA for FY 2021-22 after considering the addition of the Capex scheme completed in the respective years is tabulated below: -

Gross Fixed Assets for FY 2021-22 (Rs. Crore)

S.N	Unit #	GFA as on 01.04.19	Addition FY 2019-20	Addition FY 2020-21	Addition FY 2021-22	GFA as on 31.03.2022
	PTPS –5	291.15	-	-	-	291.15
1	PTPS – 6	996.82	-	-	-	996.82
2	PTPS – 7	945.18	-	0.95	4.31	950.44
3	PTPS – 8	954.36	0.63	1.5	4.31	960.4
4	DCRTPP-1	1132.57	11.96	2	7.87	1154.8
5	DCRTPP-2	1132.11	9.78	2	7.87	1151.76
6	RGTPP-1	2171.97	9.25	9.77	17.25	2208.24
7	RGTPP-2	2172.03	1.72	3.6	17.25	2194.6
8	Hydel	197.73	10.43	3.5	-	211.66
	Total	**9,993.91**	**43.76**	**23.32**	**58.87**	**10,119.86**

HPGCL has further submitted that Commission in its earlier order has disallowed certain capitalisation as per details given below: -

Unit	GFA as on 01.04.2020-exclusive of Ind AS	Disallowances – GAAP spares	Allowable GFA as on 01.04.2020	Addition during 2020-21	Allowable GFA as on 01.04.2021	Addition during 2021-22	Allowable GFA as on 01.04.2022
PTPS – 5	291.15	34.47	256.67	-	256.67	-	256.67
PTPS – 6	996.82	1.07	995.75	-	995.75	-	995.75
PTPS – 7	944.78	2.35	942.43	0.95	943.38	4.31	947.69
PTPS -8	954.59	5.53	949.06	1.5	950.56	4.31	954.87
DCRTP-1	1144.53	13.65	1,130.88	2	1,132.88	7.87	1,140.75
DCRTP-2	1141.89	13.65	1,128.24	2	1,130.24	7.87	1,138.11
RGTPP-1	2181.22	37.76	2,143.46	9.77	2,153.23	17.25	2,170.48
RGTPP-2	2173.75	37.76	2,135.99	3.6	2,139.59	17.25	2,156.84
Hydel	208.16		208.16	3.5	211.66		211.66
Total	**10,036.87**	**146.23**	**9,890.63**	**23.32**	**9,913.95**	**58.87**	**9,972.82**

HPGCL has further submitted that 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 2020-21

S.No.	Unit	Net allowable depreciation
1	PTPS - 6	0.56
2	PTPS - 7	26.17
3	PTPS - 8	27.28
4	DCRTPP-1	27.97
5	DCRTPP-2	28.36
6	RGTPP-1	103.64
7	RGTPP-2	102.63
8	Hydel	6.82
	Total	323.44

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 & 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 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 44.12 Cr. in FY 2021-22 while the pre-restructuring interest and finance charges for FY 2021-22 are Rs 165.38 Cr.

Therefore, there will be expected saving of Rs 121.26 Cr (Rs 165.38- 44.12 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 2021-22.

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 2020-21.

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

Interest and finance charges (Rs. Cr.) for FY 2021-22

	Int. & Fin. Charges post restructuring	**Int. & Fin. Charges pre-restructuring**	**Savings due to restructuring**	**Incentive (50% of savings)**	**Total interest expense**	**Interest expense on normative loan**	**Final Interest Expense**
1	2	3	4= (3-2)	5=50% of 4	6= (2+5)	7	8=6+7
PTPS 6	0.19	0.22	0.02	0.01	0.2	-	0.2
PTPS 7	0.64	0.67	0.03	0.01	0.65	0.01	0.66
PTPS 8	0.68	0.71	0.03	0.01	0.7	0.01	0.7
DCRTPP-1	1.05	21.81	20.77	10.38	11.43	-	11.43
DCRTPP-2	1.05	21.81	20.77	10.38	11.43	-	11.43
RGTPP-1	20.36	60.19	39.82	19.91	40.27	0.11	40.38
RGTPP-2	19.87	59.69	39.82	19.91	39.78	0.11	39.89
WYC Hydel	0.28	0.28	0	0	0.28	-	0.28
Total	**44.12**	**165.38**	**121.26**	**60.63**	**104.75**	**0.23**	**104.98**

7.4 Return on Equity (RoE)

HPGCL submitted that the Commission in its Order dated 07.03.2019 has approved the RoE at 10%. However, 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 exclusive of PTSP Unit-5 and RoE for FY 2021-22 is as under: -

Details of Equity Deployed in FY 2021-22 (Rs Cr.)

Sr. No.	**Unit#**	**Closing FY 2019-20**	**Additions FY 2020-21**	**Additions FY 2021-22**	**Closing FY 2021-22**	**Proposed RoE@ 14%**
1	PTPS – 6	156.77	-	-	156.77	21.95
2	PTPS – 7	218.04	0.19	0.86	219.1	30.61
3	PTPS – 8	218.02	0.3	0.86	219.19	30.63
4	DCRTPS-1	250.77	0.4	1.57	252.74	35.27

Sr. No.	Unit#	Closing FY 2019-20	Additions FY 2020-21	Additions FY 2021-22	Closing FY 2021-22	Proposed RoE@ 14%
5	DCRTPS-2	250.71	0.4	1.57	252.69	35.27
6	RGTPS-1	493.37	1.95	3.45	498.78	69.59
7	RGTPS-2	492.81	0.72	3.45	496.98	69.34
8	Hydel	18.35	0.7	-	19.05	2.67
	Total	**2,098.85**	**4.66**	**11.77**	**2,115.29**	**295.32**

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, 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 2019 was 7.65% p.a. Accordingly, HPGCL has estimated the working capital requirements and the interest on working capital @ 9.15% (7.65%+1.50%).

HPGCL is presently proposing the IWC as per MYT, Regulations for FY 2021-22 is as under: -

IWC (Normative) for FY 2021-22 (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**		**0.0915**
PTPS – 6	42.31	0.51	10.04	12.05	55.42	120.32	11.01
PTPS – 7	49.47	0.3	11.14	13.36	66.51	140.78	12.88
PTPS – 8	49.47	0.3	11.14	13.36	66.6	140.87	12.89
DCRTPP-1	58.79	0.36	12.05	14.46	78.63	164.3	15.03
DCRTPP-2	58.79	0.36	12.05	14.46	78.67	164.33	15.04
RGTPP-1	128.37	0.72	15.4	18.48	164.73	327.69	29.98
RGTPP-2	128.37	0.72	15.4	18.48	164.58	327.54	29.97
Hydel			3.6	3.24	4.5	11.34	1.04
Total	**515.57**	**3.27**	**90.81**	**107.9**	**679.63**	**1397.18**	**127.84**

7.6 Total Fixed Cost

HPGCL proposed Fixed Cost of HPGCL Plants proposed for FY 2021-22 is as under:

Annual Fixed Cost (Rs. Cr.) for FY 2021-22

S.N	Unit #	O&M	Depreciation	Interest & Finance Charges	Return on Equity	W/C Interest	Total Fixed Cost
1	PTPS - 6	120.47	0.56	0.2	21.95	11.009	154.19
2	PTPS - 7	133.64	26.17	0.66	30.61	12.881	203.96
3	PTPS - 8	133.64	27.28	0.7	30.63	12.89	205.14
4	DCRTPP-1	144.64	27.97	11.43	35.27	15.033	234.34
5	DCRTPP-2	144.64	28.36	11.43	35.27	15.036	234.74
6	RGTPP-1	184.76	103.64	40.38	69.59	29.984	428.35
7	RGTPP-2	184.76	102.63	39.89	69.34	29.97	426.59
8	Hydel	43.21	6.82	0.28	2.67	1.038	54.02
	Total	**1089.76**	**323.43**	**104.98**	**295.33**	**127.842**	**1941.34**

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 due to the following:

a) Provision for recovery of the fixed charges in the Long term PPA's entered by Discoms is also on the plant availability basis. With the incorporation of the said provision only HPGCL will be affected as all the other sources of supplies to the Discoms are governed on Plant availability basis.
b) As per IEGC, RLDC/ SLDC prepare the energy account on Plant Availability basis only and the said provision will be in contravention of the same.
c) CERC Regulation also allows recovery of fixed charges on plant availability basis.
d) DSM also envisage the capture of data on plant basis.

7.9 Summary of Tariff computation for the FY 2021-22

Based on above submissions the proposed tariff i.e. Total Capacity Charges and Energy Charge Rate (ECR) per kWh for FY 2021-22 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 HEP	Total
Total Capacity Charges (Rs crore)	154.19	203.96	205.14	234.34	234.34	428.35	426.59	54.02	1941.34
Energy Charge Rate (Rs/kWh)	3.630	3.488	3.488	3.470	3.470	3.687	3.687	-	

7.10 HPGCL's has Prayed as under: -

a) Admit this Petition.

b) To declare the constrains of Government restrictions on account of Covid-19 as "Force majeure" event for delay in capital overhauling of RGTPP-1 as submitted in this petition.

c) To pass appropriate order and directions to the Discoms for rationalisation of the methodology of the merit order dispatch as submitted in this petition.

d) To permit and allow recovering the excess energy generated from WYC as facilitated to other SHEP Generators at the tariff decided by the Commission.

e) Approve revised schedule of capital expenditure plan for FY 2020-21 to FY 2023-24 as submitted in this Petition.

f) Approve True-up of FY 2019-20 at Rs 255.01 Cr. after considering the Non-Tariff Income as proposed as per audited financial statements as detailed in this petition with appropriate holding cost.

g) To allow additional expenditure on account of Additional Auxiliary Consumption during RSD under appropriate head where the margins are available.

h) Provide detailed operating procedure for claiming compensation, for deterioration in the technical parameters viz auxiliary consumption, SHR and SFC due to massive and frequent backing down as per Regulation 34 of the HERC, MYT Regulation, 2019.

i) Continue relaxed norms of Aux. Cons. for PTPS-6 in FY 2021-22 as approved by Hon'ble Commission in previous years of HPGCL Generation Tariff considering the vintage of the plant of PTPS and circumstances explained in this petition.

j) Allow Plant wise recovery of Fixed Cost as submitted in this petition.

k) 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.

l) 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.

m) Treat the filing as complete in view of substantial compliance as also the specific requests for waivers with justification placed on record.

8 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 21.01.2021 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, except the comments filed by UHBVNL/HPPC on behalf of both the DISCOMs, vide memo no. Ch-37/RA/F-25 dated 18.01.2021, followed by additional comments filed vide memo no. Ch-50/RA/F-25 dated 04.02.2021. The comments/objections filed by HPPC along with HPGCL comments thereon are as under:-

i) That as per the Regulation 59 of HERC MYT Regulation 2019 titled 'COST OF POWER PURCHASE', Distribution licensee are bound to schedule power in accordance with the principles of merit order schedule and dispatch based on a ranking of all approved sources of supply in the order of their variable cost of power. Therefore, distribution licensees are bound to schedule power from various plants on the principle of merit order dispatch as mandated by HERC MYT Regulations.

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.

HPGCL Reply:

DISCOMS are taking burden of Fixed Cost / PoC Charges/PoC Losses under "fixed in nature" due to their contracted liability and justifying that the HPGCL is costly, whereas the actual cost of HPGCL plant is cheaper than the other projects in the kitty of HPPC, as explained hereunder:-

Plant	Fixed Cost	Energy Charge	PoC Charge	PoC Losses (3%)	Total Cost/Unit
ISGS (Thermal)	2.838	1.45	0.82**(Normative)	0.153	5.261
ISGS Hydro	2.25	2.25	1.40**(Poc Impact as per CuF)	0.177	6.077
HPGCL	0.77	3.64			4.41

**The actual implication may be higher than normative/CuF in case of less scheduling.

Thus, a detail exercise needs to be carried out to ascertain the average cost of power to State from each source considering yearly implication of PoC Charges against scheduling.

The reference is invited to the submission made by UHBVN, wherein they are itself admitting that they are contradicting the HERC MYT Regulation 59 in toto by scheduling the power on the basis of “Energy Charge”, whereas the directive as per the instant Regulation is to schedule the power on “Variable Cost” basis only.

The “Variable Cost” has not been defined under HERC MYT Regulations, thus the MoD being prepared by Discoms considering “Energy Charge” is purely on the “Marginal Cost Saving Basis” only, as per the whims and presumptions of the Discoms and taking the base that others are following the same.

It is further apprehended that just to reduce their losses or favoring ISGS stations by considering Wheeling Cost of power under “Fixed in nature” HPGCL unit’s / State Generators remains on RSD and other ISGS are getting scheduled in the matter. The same needs to be evaluated independently.

HPGCL further submitted that any power plant is having two types of Charges

a) Fixed Cost
b) Energy Charge

and the third charge is associated wheeling cost of the power to State periphery i.e. PoC Charges & Losses are not related to the generation cost, and the agreement of the same is with third agency i.e. PGCIL .

Further, it is also the admitted facts of Discoms in 56th SCPP meeting where they itself submitted that Transmission Utilization factor under contracted PPAs is only 55% and the balance 45% remains unutilized by Discoms, thus a preferential treatment is being given to ISGS stations by considering the wheeling cost under fixed component in the matter. Presently it can be seen that the PoC liability has increased considerably and still the wheeling cost benefits are given to ISGS station by considering under Fixed cost and creating an inequitable field for State Based Generators.

This means that the Discoms has the liability of Rs 2036 Crore (FY 19-20) in respect of PoC being considered as Fixed in Nature, the amount of Rs 916 Crore which remains unutilized and the benefit of the same is being given to ISGS stations on the name of cheaper power.

Thus, a good amount of burden is being borne by Discoms for ISGS Stations in respect of unutilized PoC Charges of 45% and providing the helping hand to reflect their cost as cheaper than the State Based Generators.

HPGCL was envisaged as Base Load Stations and required to be remained on bar, however on pretext of deficit in demand supply scenario Discoms have added the sources, which are required to be run after the consumption of base Load stations, the scenario has been reversed by Discoms to the reasons better known to them due to certain liabilities created under "Fixed in nature" heads. HPGCL takes this opportunity to seek the intervention of the Commission to audit the actual cost of power added Since 2012 (without bifurcating Hydro/gas/Thermal) by Discoms, whether the same are actually cheaper than the HPGCL units on landed cost basis (considering the actual energy charge based on scheduling and its yearly implication of PoC charges and losses) on the scheduled generation.

In view of the above the observation of Discoms need to be rejected.

Additional submissions of DISCOMs:

The Commission during public hearing held on 21.01.2021 had directed the DISCOM to submit their comments on report of M/s 50 Hz, engaged by HPGCL with the aim to understand the reasons behind its generation not getting scheduled by interpreting the Merit Order Despatch (MOD) methodology currently in practice by the state of Haryana & evaluate specific approaches that may aid power plants of HPGCL to improve their position in the MOD and to optimize the operation of HPGCL power stations themselves to minimize the operation costs.

The comments of DISCOMs on the said report are as under: -

a) The report submitted by M/s 50 Hertz advocates to include the PoC charges (in Rs./Kwh) in ECR rate while preparing the MoD for scheduling purpose. However, as per CERC "Sharing of Inter-state Transmission charges & Losses Regulations", the PoC charges for LTA quantum is being levied by PGCIL in Rs./MW/Month for the power to be transmitted from CGS/ISGS and is independent of the energy scheduled/PLF of a particular plant. The PoC charges can be considered as fixed charges being paid to PGCIL/Transmission Licensees for usage of transmission system. As such, converting the quantum of LTA (in MW capacity) into Kwh by considering 100% or normative utilization and calculating the cost of PoC charges on per unit basis is incorrect representation and changing the nature of PoC charges from fixed to variable.

   Moreover, the FAQ No. 118 on applicable CERC Regulations on POC charges available on the POSOCO website states that Transmission POC charges are fixed charges and cannot be included in variable charges of a power plant while preparing merit order. The Q. No. 118 and the reply given by POSOCO is reproduced as under: -

   "How would merit order of Power Station be affected with the new regulation?

   A: Transmission charges are in the nature of fixed charges and would therefore, not affect the merit order. However, transmission losses have an effect on the cost of power deliver at the state's doorsteps. Hither to merit order for each state within a region was uniform for all power stations within the region with the zonal POC losses for this would change and each state would have its own merit order based on cost of power delivered (worked out considering energy charge rate ex-power plant injection POC losses and state drawl POC losses)."

b) Further, there is no regulation/guidelines defining the procedure for preparation of Merit Order by inclusion of POC charges, as admitted by M/s 50 Hertz in its report.

c) Most of the states are following similar procedure while preparing MoD, as being followed by the state of Haryana and do not include Transmission PoC charges while calculating the cost of power at state periphery in the merit order.

d) The collection of data in a certain format by CEA does not qualify as a regulation and therefore does not amount to any specific instructions in this regard.

e) POC losses are already being considered while preparing the MoD.

f) Fixed charges are being paid to Generators by Discoms on declared energy given by respective generators instead of scheduled energy. Hence, the same can't be considered while preparing MoD.

g) Moreover, HERC in its order dated 23.04.2020, in the petition filed by HPGCL titled "Determination of generation tariff of HPGCL's plants for FY 2020-21" on the matter of methodology for considering Point of Connection (PoC) charges and losses in the Merit Order Dispatch (MoD), has recorded as under: -

"The Commission has taken note of the aforesaid submissions.
As far as MoD is concerned, it is observed in the minutes of the conference of Power Ministers of States held on 11th and 12th October, 2019 at Tent City, Gujarat deliberated the issue as under:-
For Implementation of Merit Order Dispatch across the country, a Group has been constituted in Ministry of Power under the Chairmanship of Shri Sanjiv Nandan Sahai, then, Special Secretary, Ministry of Power with members from CERC, CEA, POSOCO and representatives from five States (Gujarat, Uttar Pradesh, Karnataka, West Bengal and Assam). The issues relating to the options for implementation of merit order dispatch across the country are being discussed in the Group. It was shared that the concerns raised by the States are mainly relates to two issues i) Impact on POC transmission losses & charges and ii) Issues related to Fuel like Take or pay commitments, Incentive paid for off-take of fuel in excess of the norms specified in the FSA etc. Gujarat and Uttar Pradesh have submitted some of the data for a case study being done under POSOCO. Other States were also requested to volunteer for such study which is underway.
This model needs to be replicated at National level including intra-state generators to get maximum efficiency. However, while doing so the concerns of the States need to be addressed appropriately.
In view of the above, it would be appropriate for the Commission to wait for the recommendations of the expert Group constituted for the purpose so that national level uniformity is ensured on MoD dispatch principles."

h) As present, the work of scheduling of power from various generators is being carried out by SLDC, Panipat based on the data provided by DISCOMs.

i) In case PoC charges which are fixed in nature and mandatorily to be paid, are being included in the ECR variable Rate while preparing Merit Order (as suggested in the report), the overall power purchase cost of DISCOMs will increase for the same quantum of power.

j) The aim of the study was also to optimize the operation of HPGCL power stations so as to minimize their operation costs. However, the report submitted along with the petition is silent on this aspect. The Commission be requested to direct HPGCL to furnish the report submitted by M/s 50 Hertz on this aspect as well and the action taken by HPGCL on the said report.

   In view of above, it is submitted that the methodology of MOD prescribed in the report shall increase the overall power purchase cost of DISCOMs and the litmus test of the methodology of MOD should be in such manner, so that power purchase cost of state shall be reduced. Hence, HPGCL may be requested to re-evaluate the report.

k) Losses incurred by Haryana DISCOMs due to out of turn running of HPGCL Units during peak season: SLDC, Haryana issues various instructions to DISCOM's particularly during peak season to maximize the internal generation and also to bring units at 220 kV level located in paddy areas on bar in violation of merit order particularly when the state demand is more than 8500 MW. During peak season of FY 2020-21, as per the instructions received from SLDC, internal generation on bar from power plants located in Haryana was maximized to the order of 3000-4000 MW. At the same time units of DCRTPP and PTPS at 220 kV level and located in paddy area were also kept on bar in violation of merit order. However, low voltage problem still prevailed in spite of following all the instructions issued by SLDC. The above facts indicate that putting PTPS and DCRTPP units into the system in violation of merit order as advised by SLDC was not helpful and as such instructions were passed without any scientific study and need re-examination.

   It was decided in the 42nd SCPP Meeting that "HVPNL authorities would meanwhile expedite the upgradation/augmentation of their transmission network so as to eliminate system constraints and also convey timelines for completion of all such work by the end of month." As per the status of above works submitted by HVPNL, it has been observed that upgradation/augmentation of transmission network particularly in paddy area has been largely completed, however, instructions regarding running units out of merit order is still being issued by SLDC. The instructions received from SLDC to run units in violation of merit order causes financial loss to the DISCOM's and burden the consumers of the state. SLDC need to reconsider the issue and not burden the DISCOM's financially with such directions.

Rejoinder filed by HPGCL:

HPGCL arguments further got strengthen that PoC Charges are not levied on the State Generators and is applicable only on ISGS generators. In case the MoD prepared by applying the principle of MoD as per above amongst ISGS only, then its correct, but how the treatment of State Based Generators be done which are not covered under the above said reference on which the DISCOMs are relying.

HPGCL Units are "Base Load" Stations and are required to be remained on bar and any shortfall after that is required to be requisitioned from outside, as the capacity added is on the basis that any short fall will be met after consuming the already contracted sources. The normative value of ECR & Fixed Cost in DISCOMs ARR while making APPC till date. However, even after the directive to utilise the said sources, DISCOMs are violating all norms on the pretext of MoD and HPGCL allowed cost is being diverted for purchase of power from other sources by placing the State Generating plants under RSD.

DISCOMs are again and again pleading that there is no Regulation for considering the PoC Charges under MoD, but failed to provide any valid document which says all ISGS and State Generators are to be part of same MoD. Without, prejudice, if the DISCOMs version be accepted, then generation shall be there in pit head areas only which leads to national grid security issue. To overcome such issues, State Based Generators are placed near the load centre.

Further, it is also a matter of the fact that, when in the past any capacity addition has been done, is primarily on the basis that there will be demand supply gap, thus the already running sources are required to be on bar and added capacity will be scheduled only after exhausting already contracted sources. **However, the scenario has been reversed and ISGS plants are being given preferential treatment by**

sacrificing State Generating Units, which is clear loss to State Equity and Employment due to their contractual liabilities.

However, HPGCL has already placed the MoD order of UPERC and MSERC for reference of the Commission in last ARR petition.

The CEA MoD document clearly established that except fixed cost of plants all cost incurred for wheeling of power from plant to State periphery is part of "Variable Charge" , thus a valid and true reason is to equate all plants in one MoD, as the State plants already suffered from location disadvantages and needs to be given equitable field for operation. HPGCL plants having location disadvantage, as situated at fag end from coal mines, and even after doing best practices, the plants of HPGCL are treated as water taps to create more losses to State equity and giving preferential treatment to ISGS stations.

DISCOMs have failed to provide any valid document on which reliance has been made for incorporating PoC losses in MoD. Thus, it's now established that DISCOMs are using their whims to change the stance for creating the MoD in favour of ISGS Stations. HPGCL from last one year is only requesting to consider the wheeling cost i.e. "PoC Charges & its associated transmission losses" in Variable Cost to prepare the MoD. The total cost (including fixed cost, Energy Charge and its wheeling charges and losses) needs to be considered at the time of evaluating the cost of power to ascertain true cost of power and implication on APPC, whenever any additional capacity is being added in the State.

The reference to the order dated 24.04.2020 of the Commission is unwarranted, as the expert group constituted by MoP/GoI are only for the NTPC/CGS projects under "SCED" (Security Constrained Economic Dispatch") to run the NTPC projects in optimum way by considering NTPC Projects under one pool and save the cost in respect of transportation of fuel for NTPC Projects only. It is further added that even IPP and State generators are not being considered under the part of the said "SCED".

The System operation in UHBVN is directly handling all scheduling activities and just copy of the same is marked to SLDC. **This is clear violation of Regulation**

2.7 of the Indian Electricity Grid Code 2010. Thus, the Commission may direct SLDC/Haryana to take scheduling activities independently outside the scope of Haryana DISCOMs as per the mandate of IEGC/ Electricity Act, 2003.

The DISCOMS has made the admission of the fact and HPGCL apprehension stands established that losses and contractual liabilities are being served on the pretext of cheaper power by favouring ISGS stations. Now, the issue has been established by DISCOMs itself that HPGCL units would never be costly, if true aspects be seen. Thus HPGCL units have been ruined on the pretext of cheaper power being arranged from outside the State. The matter for cost optimisation has already been deliberated by SCPP after the receipt of M/s 50 Hertz report and the directions have already been imparted by worthy ACS/Power to surrender the LTA for the sources where have the DISCOMs had the meagre scheduling.

Thus, the Commission may take the note of the admissions of DISCOMs, and direction is to be given to include the PoC charges and losses in the Energy Charge for arriving as “Variable Cost” of project for preparing MoD in the matter.

It is regretted to note that DISCOMs are challenging the IEGC 2010 provisions in the matter, and same is not the appropriate forum for that. DISCOMs may be requested to approach APTEL/CERC/ Delhi High Court for seeking the relief by taking grid control under the jurisdiction of DISCOMs. Till the same is not done, SLDC has the power to control the grid as per the IEGC, 2010/ Electricity Act, 2003 as under:

*“**Section 32: Indian Electricity Act2003***

The State Load Despatch Centre shall-

a. Be responsible for optimum scheduling and despatch of electricity within a State, in accordance with the contracts entered into with the licensees or the generating companies operating in that State;

b. Monitor grid operations

c. Keep accounts of the quantity of electricity transmitted through the State grid

d. Exercise supervision and control over the intra-state transmission system *e. Be responsible for carrying out real time operations for grid control and despatch of electricity within the State through secure and economic operation of the State grid in accordance with the Grid Standards and the State Grid Code.*

Section 33. (Compliance of directions): *---*

1) The State Load Despatch Centre in a State may give such directions and exercise such supervision and control as may be required for ensuring the integrated grid operations and for achieving the maximum economy and efficiency in the operation of power system in that State.

2) Every licensee, generating company, generating station, sub-station and any other person connected with the operation of the power system shall comply with the directions issued by the State Load Despatch Centre under sub-section (1).

3) The State Load Despatch Centre shall comply with the directions of the Regional Load Despatch Centre.

4) If any dispute arises with reference to the quality of electricity or safe, secure and integrated operation of the State grid or in relation to any direction given under sub-section (1), it shall be referred to the State Commission for decision:

5) Provided that pending the decision of the State Commission, the directions of the State Load Despatch Centre shall be complied with by the licensee or generating company.

6) If any licensee, generating company or any other person fails to comply with the directions issued under sub-section(1), he shall be liable to a penalty not exceeding rupees five lacs."

*"**Regulation 2.7.2 of IEGC, 2010:***

In accordance with Section 33 of the Electricity Act, 203, the State Load Despatch Centre in a State may give such directions and exercise such supervision and control as may be required for ensuring the integrated grid operation and for achieving the maximum economy and efficiency in the operation of power system in that State. Every licensee, generating station, sub-station and any other person connected with the operation of the power system shall comply with the directions issued by SLDC under sub section (I) of Section 33 of the Electricity Act, 2003."

In view of the submissions of DISCOMs, one more aspect has been reflected that DISCOMs are resorting for short term purchase beyond the TTC limits on the pretext of so called "Cheaper Power" and idling the contracted sources which in turn invite penalties of non-lifting of Coal on State / other generators, thus burdening the consumer more instead of savings.

SLDC is performing as per IEGC/EA, 2003 and give instruction for better monitoring of the grids and DISCOMs are liable to accept and utilise its resources of contracted power in better way instead of resorting to SToA/MToA, which ultimately leads to burdening the Consumer of the State. Thus, the operation of SLDC should be appreciated instead of questioning on it.

The reference is further invited to Section 12 of the Electricity Act, 2003, wherein it has been clearly established that "**Trading in Electricity**" is the separate licensing activity and presently under the control of the DISCOM's. The HPPC is being used as extended arms of DISCOMs and power purchase is being managed in the interest of DISCOMs, which are not the spirit for creating the forum in the matter.

It is therefore proposed as under:

1. The HPPC should be ring fenced in such a way that the APPC shall be filed separately in HERC by HPPC independently on the past year scheduling basis only and the DISCOMs are required to demonstrate their collection efficiencies independently.
2. SLDC should be strengthened to prepare/ implement MoD in true sense and operate the Long term PPAs scheduling independently outside the scope of DISCOMs, as mandated in the Electricity Act, 2003 and IEGC 2010.

ii) The start and stop operations of generating units is dependent on the variable cost of their units and the variation in demand of power in the state. The less schedule of power from HPGCL by DISCOMS is due to the fact that the variable cost of their plants is on the higher side in comparison to other power generators/suppliers.

HPGCL's Reply:

As submitted above, "Variable Cost" has never been defined by the Commission under MYT Regulation. As per MYT only two components i.e. Fixed Cost & Energy Charge have been identified by the Commission.

HPGCL would like to take this opportunity for intervention of the Commission to seek the details of the similar stance taken by Discoms with other ISGS stations, and the outcome of the same be ascertained before deducting any cost of HPGCL units.

It is also the matter of the fact that Discoms have certain sources (CGS) in their kitty, where the meager scheduling is there and no true up was offered by the ISGS generators to Discoms. The same also needs to be ascertained in the matter. The reasons for step treatment for HPGCL by taking different stance are better known to the Discoms.

The variable cost needs to ascertain by considering Energy Charge Rate and Yearly PoC Charges & Losses implication for the project, whereas the HPGCL have only two heads of tariff Fixed Cost & Energy Charges, however no implication of PoC Charges and losses is being levied on HPGCL projects.

In view of the above, the Commission is once again requested to ascertain the actual cost of all power projects at State Periphery in the matter to ascertain the true reason of low PLF of HPGCL units.

iii) There have been large variations in the month to month variable cost of HPGCL generating units for which other Discoms/ HPPC cannot be held responsible. The procedure being prepared by HVPNL for allowing the claim for excess expenditure on account of start/stop operations is still to be notified/approved by Commission. It is also submitted that the approval of procedure for DSM applicable to State generating plants is also under process and therefore no claim should be considered till the time above two procedures come into force.

HPGCL's Reply:

The variation in ECR and the same is based on the various factors like Coal Cost/ any credit note received, which may becomes the part of the Coal Cost and reflects in the Energy Charge of the month. Thus, variation in Energy charge is primarily based on the coal cost. It is also the matter of the fact that other generators are also having variations more than the HPGCL units; the same has never been commented by the Discoms. At this juncture, the Discoms are required to produce the communications carried with various other generators on the issue of variation of Energy Charge.

In view of the above the observation of Discoms need to be rejected and independent view be taken in the matter.

iv) It is submitted that the Commission in its order dated 24.04.2020 directed HPGCL as under:

"HPGCL is directed 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."

Hence, claim of HPGCL amounting to Rs.19.46 crore on account of Additional Auxiliary Consumption (AAC) under true up of O&M expenses for FY 2019-20 may not be considered, as there are no norms for separate compensation for Additional Auxiliary consumption (AAC) as per HERC MYT Regulation,2019.

HPGCL's Reply:

The definition of the Auxiliary Consumption as per MYT is as under:

"in relation to a period means the quantum of energy consumed by auxiliary equipment of the generating unit / plant such as the equipment being used for the purpose of operating plant and machinery including switchyard of the generating station and transformer losses within the generating unit / plant, expressed as a percentage of the sum of gross energy generated at the generator terminals of the generating unit / all the units of the generating plant; Provided that AUX shall not include energy consumed for supply of power to housing colony and other facilities at the generating station and the power consumed for construction works at the generating station;"

It is clear from the above definition that the Auxiliary Consumption of the Units is the self-consumption made by HPGCL Units while on bar. Thus, when the units are under Reserve Shut Down (to declare plant available), certain auxiliaries remain on bar and for energizing the same the power needs to be requisitioned from the grid, hence it's an additional expense / burden on HPGCL and needs to be booked under O&M. Thus, as per the directives of the Commission, HPGCL has approached to the Commission by seeking the permission to adjust the said expense which is mandatory for making plant available to be booked under relevant heads, where the margins are available. Thus, the position taken for denial the Additional Auxiliary Consumption (AAC) is arbitrary and reflects the step attitude towards HPGCL to create financial loss in the matter. It is further requested that, If the similar stance has been taken by Discoms for other ISGS stations, there may be huge savings in the matter.

v) HPGCL mentioned that oil consumption of the generating plants mainly depends upon its scheduling/PLF/no. of start & stop operations and is requesting for compensation on account of oil consumption. In this regard, it is submitted that specific oil consumption for PTPS-6 is 5.17 ml/kwh for the two start & stop operations only, which is more than 500% of the prescribed limit i.e. 1.0 ml/kwh mentioned in HERC MYT Regulation. Oil consumption of all the units of HPGCL except DCRTPP is on the higher side. Hence, the compensation on account of oil expenses may not be considered.

HPGCL's Reply:

As per Regulation 34 of the MYT, the oil consumption for cold start-up of 210/250MW thermal units is prescribed as 50KL not the 1.0 ml/KWH. The reply given by Discoms is arbitrary and without any base in the matter.

The Oil Consumption of 1.0 ml/KWh is allowed on normative basis when the unit remains on bar @ normative PLF for whole month and not covered the specific start stop operations. The unit was called in after the considerable duration. Further as per Regulation, if the normative limits were exceeded on year to year basis the loss has to be borne by HPGCL.

vi) In order to implement the new environment norms of MOEFCC & installation of FGD, the following are the submissions of HPPC:-

a) Before implementation of new norms, HPGCL is requested to furnish present prevailing parameters of Sox, Nox, pm, Hg and specific water consumption of each and every unit of their stations.

b) HPGCL had asked for additional Capex for FGD for fulfilling environmental norms in its tariff petition in year 2019 as well. The Capex plan is still the same however the total amount for RGTPP has increased by Rs 43 Crores and a whopping Rs. 149 Crs for DCRTPP.

c) HPGCL claimed tentative indicative Capex for installation of FGD on RGTPP, Hisar @ Rs.48.56 lac/MW and DCRTPP, Yamuna Nagar @ Rs.72.39

lac/MW seems to be higher side as compare to the indicative cost i.e. Rs. 37 Lac/MW & Rs. 43.5Lac/MW respectively mentioned by CEA.

d) Tentative impact on tariff (per/kwh) due to installation of FGD System shall be determined/ indicated. However, recently, CERC vide its 1st amendment of CERC Tariff Regulation, 2019 has come out with determination of supplementary tariff for Emission Control System installed in Coal based thermal generation station.

e) FGD system to be used by HPGCL produces Gypsum as a by-product. Gypsum has commercial value & is saleable in the market and therefore, the revenue which HPGCL would earn from the sale of Gypsum shall also be necessarily quantified by HPGCL. The revenue to be earned by sale of gypsum as by-product shall be passed on to Discom.

f) As Per Provision of Gazette MOEFCC Notification Dated 03.11.2009, issued By MOEFCC GOI, the Revenue earned through Sale of Ash Products is transferred to Dry Ash Fund. This fund is meant to be utilized towards expenditure on development of Infrastructure Facilities, Promotion & Facilitation Activities for use of Fly Ash.

Taking into consideration of non-utilization of Dry Ash Fund, it is requested to Hon'ble Commission to direct HPGCL to utilize the fund by incurring capital expenditure on implementation of MOEFCC norms/std i.e. capex for installation of FGD.

HPGCL's Reply:

HPGCL has submitted that the Implementation of the New Environment Norms falls under "Change in Law" category and HPGCL shall file a separate petition in the matter. Thus, the issues raised by the Discoms are not covered under the scope of the present petition and Discoms have the liberty to intervene when the petition under "Change in law" for claiming the cost of FGD is placed before the Commission for consideration. Discoms may be directed to take the same stand with other generators in the interest of the Consumers of the State.

Further, the Discoms have agreed with the MoEFCC guidelines that the ash fund need to be created as separate fund and to be utilized towards expenditure on development of Infrastructure Facilities, Promotion & Facilitation Activities for use of Fly Ash only. Further, HPGCL would like the attention of the Hon'ble Commission that MOEF Notification dated 03.11.2009 has been issued under sub-

Section (1), Clause(v) of Sub Section (2) of Section 3 and section 5 of the Environment (Protection) Act, 1986 (29 of 1986). Therefore, the reference is further invited to Section 15 of the Environment Protection Act, 1986 where the penalty/punishment up to imprisonment up to five years is there for not complying the rules and guidelines framed by MoEF&CC and diverting the ash funds. Thus, the said fund is mandatory to be utilized towards expenditure on development of Infrastructure Facilities, Promotion & Facilitation Activities for use of Fly Ash only. Thus, it is not possible to divert the said funds for FGD installation works. However, the Commission may direct Discoms to provide the precedence as suggested by them in the matter. The arbitrary submissions need to rejected as submitted by the Discoms in the matter.

vii) **Force Majeure of Unit-I, RGTPP:-** In this regard, it is submitted that HPGCL in its petition mentioned that the proposal of M/s SEC China has been received for supply, erection, testing and commissioning of PT Cubical, NGT penal and Bus duct on 06.01.2020 and the work order has been issued by HPGCL on 10.01.2020 with completion period upto 27.02.2020. Further, after issuance of work order, M/s SEC vide e-mail dated 05.02.2020 intimated that due to pandemic of covid-19, the workshop was non-operational till 10.02.2020 and warning notice was also issued by M/s SEC on 17.02.2020. HPGCL had to intimate this fact to HPPC immediately whereas they informed HPPC on 04.03.2020 after a period of one month.

In view of above, the request of HPGCL may not be considered for Deemed availability as the additional burden of fixed cost will put more financial burden on Discoms and ultimately on the consumer, who are largely impacted by the Covid-19 pandemic.

HPGCL's Reply:

HPGCL has not claimed any deemed availability in the matter and just sought the actual expense deficit only. The prerogative of declaring "Force Majeure" event as per the HERC MYT Regulations lies with the Commission; hence the Commission is requested to kindly identify the pandemic event faced by HPGCL which delays the capital overhauling as "Force Majeure" event and restore HPGCL to the same economic condition as the Force Majeure has not been occurred for RGTPP-1.

viii) **Merit Order Scheduling: -** HPGCL stated that the procedure for preparing merit order dispatch has been termed as improper whereas the methodology practiced by HPPC is also being followed by other states/Discoms. The Commission in its Order dated 24.04.2020 has already decided that the findings of the expert Group specifically constituted for the purpose, shall be deliberated once they are available and shall be adopted.

Further, the request of the Petitioner to include cost of CTU Transmission Charges in the variable charges for the purpose of merit order stacking is without any basis & justification and also not in line with POSOCO dispensation on the issue as Transmission Charges are of fixed in nature and would therefore not affect the merit order stack. HPPC has further explained that the variable cost of interstate generating stations considered for merit order dispatch & schedule is worked out by grossing up the interstate transmission losses so as to make it equitable for both interstate as well as intrastate generating stations.

HPGCL's Reply:

The detailed reply has already been submitted above. Further, the expert groups are only for the NTPC/CGS projects under "SCED" (Security Constrained Economic Dispatch) to run the NTPC projects in optimum way by considering NTPC Projects under one pool and save the cost for NTPC Projects only. It is further added that even IPP and State generators are not being considered under the part of the said "SCED".

The reference is further invited to the Commission that the "Electricity / Power" is under Concurrent List as per the Constitution of India and the Commission is free to make the law of the land i.e. State of Haryana in the interest of Consumers.

Without prejudice, even if the apprehension that transmission charges are "Fixed in Nature" holds good and then coal transportation cost of the project can also be considered under "Fixed in Nature" while evaluating Energy charge of the HPGCL units. The power lies for adjudicating the same lies with the Commission as per Regulation 78 &81 of HERC MYT. Regulation.

As the same was exercised by the Commission while disallowing the RoE in last year, however, the same has been challenged by the HPGCL at APTEL.

ix) **Coal Penalties on account of short Lifting of Coal and its impact under MoD:-** HPGCL stated that there would be short lifting of coal penalty amounting to Rs.460 crore. In this regard, it is submitted that due to COVID-19 Pandemic being Force Majeure, power demand was considerably reduced in Haryana, which resulted into less offtake of coal. Accordingly, it is suggested that HPGCL be asked to take up the matter with Coal Companies, MoC and MoP rigorously to avoid any short lifting penalty of coal being force majeure event. It is also suggested that HPGCL should explore option to avoid the burdening of short lifting penalty.

HPGCL's Reply:

HPGCL being the State Utility has made the entire endeavour to reduce the burden of coal penalties by racking the matter with the quarter concern. Even in the pandemic, on account of rigorous efforts with support of the Government, the Coal India has accepted the non-lifting of coal for April,20 & May, 20 as "Force majeure" and accordingly the burden on consumers be reduced to such extent. However, it is reiterated that the coal penalties are always pass through and the DISCOMs should make all attempt to schedule the plants in place of resorting to Short term/ Medium Term purchase of power, to avoid double implication on Consumers of the State and public money invested in the State Plants be utilized in optimum way.

x) **Western Yamuna Canal Hydel Project- Consideration under RE Regulation: -** HPGCL has claimed that WYC Hydel power station falls under RE regulations of HERC and has requested to allow same tariff for the excess energy generated beyond the allowed CUF. In this regard, it is submitted that HPGCL may file a separate petition for determination of tariff of WYC Hydel power station as per HERC RE regulations and the same shall be applicable prospectively.

HPGCL's Reply:

It is the matter of great appreciation that the Discoms has accepted the stand of WYC Hydel of HPGCL open heartedly to consider under the RE Regulations at par with other SHEP of the State.

It is further submitted that, as the tariff regulation components are same for all projects as per respective tariff regulations and also the sole prerogative of the Commission. Therefore, there is no need to carry the separate exercise for evaluating the tariff; just declaration of the project under RE Regulations will serve the purpose for HPGCL. This not only saves the precious time of the Commission and also serves the justice in the matter in one goes.

xi) **DSM: -** HPGCL requested to consider DSM charges on the plant basis instead of unit basis. In this regard, it is submitted that DSM charges should be made applicable to individual units of HPGCL, since each unit has different variable cost and different schedule dispatch is given accordingly. Hence, DSM is applicable as unit wise instead of plant wise.

HPGCL's Reply:

The Discoms has failed to recognize the basic difficulty in the matter, it is the matter of the fact that the DSM is applicable on "Plant Basis" not the "Unit Basis". The same is being accepted by them for all ISGS Plants including State Based APCPL/NTPC Fbd/CLP, then why the different stand is being taken by them in the matter is better known to them.

The SLDC will catch the feeder data only, not the unit data, as the meters are installed at outgoing feeders of the plant, the matter of concern should be appreciated and the national level accepted criteria should be implemented for better management of the Grid and HPGCL shall be allowed to declare the plant-based availability instead of Unit based availability as accepted by Discoms for all ISGS plants.

Thus, to avoid any ambiguity in the matter, the plant-based availability and scheduling be considered in the matter instead of Unit based. Therefore, the Commission may consider the submissions in assertive way to avoid unnecessary financial hardship to HPGCL and be allowed to recover the tariff at par with APCL/NTPC Faridabad being a similar generating entity.

xii) **Breakdown of Khedar 2, Hisar:-** HPGCL is shifting the responsibility of their inefficiency of annual overhaul carried out by them on the unit and citing the reason for its breakdown as frequent start/ stop operation of the unit. In this regard, it is submitted that all thermal generating units are given schedule as per their position in merit order in order to meet the demand of the State. No such objection has been received from similar capacity of thermal units which are also being scheduled in same fashion. The change in variable cost of Khedar units on month to month basis is one of the reasons for its multiple start/ stop operation.

HPGCL's Reply:

The submission made by Discoms on the issues is denied summarily in the matter. HPGCL never ever shifts its inefficiency in the matter on Discoms. The fact is that the HPGCL are conceived as "Base Load" plants and were required to be on bar, whereas the HPGCL Units are being treated as peaking loads stations by Discoms as per their desire.

The OEM has flagged the issue which has further raised by HPGCL as genuine concern. It should be noted that the State Equity and Exchequer has been placed in these plants and wrongful operation of the HPGCL units are directly loss to State and erosion of state equity by wasting the money on increased O&M is not justified in the matter.

xiii) **O & M Expenses- Employee Cost including terminal benefits: -** As regards to the claim of HPGCL on account of true up of employee cost for FY 2018-19 amounting to Rs. 242.05 crore, HERC in its order dated 24.04.2020, had directed HPGCL to appoint a third-party expert agency to re-visit the entire issue of valuation of employee cost in concurrence with Discoms. However, till date HPGCL has not sought concurrence from Discoms regarding appointment of third-party agency.

HPGCL's Reply:

The Commission reference is invited to UHBVN claim of Terminal Liability of UHBVN as under:

FY	Amount in Crs (HERC Order Dated)	Variation from previous year
2014-15	23.41 (01.08.16)	-
2015-16	268.27 (11.07.17)	244.86 Cr.
2016-17	421.06 (15.11.18)	152.79 Cr
2017-18	696.2 (07.03.19)	275.14 Cr
2018-19	304(01.06.20)	-392.21 Cr
2019-20	397(proposed)	93.01Cr

The trend in Terminal Liability accepted by the Commission for UHBVN needs to be seen. If there are so many variations in the past, the similar trend is with HPGCL and need not be commented by UHBVN in the matter.

Further, as the Actuarial Valuation for the FY2018-19 was carried out by the same agency for UHBVN/HVPNL/HPGCL, the Commission has accepted the valuation of other utilities despite variations, and HPGCL has been asked to go for audit.

If the sudden variation positive or negative has been observed by the Commission in respect of any utility then same principle needs to be applied to all utilities in the matter.

HPGCL has opted for consolidated appeal in the matter at APTEL, and hadn't sought any money from the Discoms, till date. Thus, once principally the matter has been settled by adjudicating authority, then as per the outcome, HPGCL will take the future course of action in the matter.

xiv) **Liability on account of AAC for HPGCL is of the tune of 19.46 crore:-** Further it is submitted that claim of HPGCL amounting to Rs.19.46 crore on account of Additional Auxiliary Consumption (AAC) under true up of O&M expenses for FY 2019-20 may not be considered, as there are no norms for separate compensation for Additional Auxiliary consumption (AAC) as per HERC MYT Regulation,2019.

HPGCL's Reply:

It is for the kind information to the Commission that the expense to running the machine is part of O&M cost and same needs to be booked under O&M expenses. The Discoms fail to provide any proof that how the other ISGS stations where the scheduling is meager, booked the power consumed from grid. Whether any objection has been raised by Discoms in the matter ever with CLP/APCPL/NTPC Faridabad etc. Thus, a legitimate expense which is part of the O&M head cannot be denied in the matter on the basis of arbitrary submissions. HPGCL is specifically raising the matter to show the impact of backing down cost of HPGCL Units and liability of the same on the Consumer of the State. It is also the matter of the fact that there is no other income source which helps to adjust the said expenditure of AAC except O&M, and the option was there to adjust in audited accounts. But the HPGCL is approaching with clean hands to the Commission to allow adjusting such genuine expense in the matter.

xv) **Interest & Finance Charges: -** The Commission in Tariff Order dated 24.4.2020 has clearly stated that the saving in interest due to decrease in the rate of interest by the original sanctioning authority cannot be allowed as savings under incentive and penalty framework. Further, the reduction in interest & finance cost for HPGCL for the true-up of FY2019-20 is due to external factors and not solely due to the efforts of HPGCL. As per FY2019-20 annual report of PFC, the proportion of funds raised from international market has increased and is expected to increase further in future as well. This automatically reduces the input cost of funds for PFC and hence the lending cost. As PFC is the parent company of REC, similar reduction in input cost of funds shall be applicable for REC too.

In view of above, the Commission is requested to approve only the audited interest and finance charges of HPGCL for the true-up of FY 2019-20 and do not allow the incentive as saving on restructuring of loan in FY2020-21 and FY 2021-22 as well under the incentive and penalty framework of MYT Regulations 2019.

HPGCL's Reply:

It is the matter of the fact that any Thermal generator has the option to repay the loan as per its tenure and HPGCL is no exception to it. Further, if the Fixed cost of the project is being evaluated under Section 63/62, the generator is free to opt to repay the loan early or to create the additional investments on account of internal accruals.

Thus, HPGCL has the two options in the matter, either to create the internal accruals or repay the loans. Thus, the HPGCL opted to repay the loan to reduce the burden on DISCOMs in turns consumer of the State instead of the creating internal accruals in the matter. Sharing of the gain is nothing but the seeking a return of interest on internal accruals which are used to repay the loans in the matter and the same needs to be seen in that aspect.

Therefore, the Commission is requested to reject the arbitrary stand taken by DISCOMs with the request that they should provide the relevant proof that DISCOMs has taken the similar stand under section 62 PPA's and availing the benefits to reduce the burden on the Consumers of the State.

Additional submissions of DISCOMS:

The benefit of restructuring of loans shall be claimed during the year of restructuring and cannot be claimed again and again. HPGCL in the true-up of interest and finance charges for FY 2019-20 has claimed the benefit of restructuring of loans whereas benefit of restructuring of loans has already been taken in FY 2018-19.

E.g. REC loan of 659.70 crore @ 12.25% p.a was switched over at interest rate of 9.08% p.a. during FY 2018-19 and the benefit was claimed during the true-up of FY 2018-19 but again in the true-up of FY 2019-20, that loan has been shown under pre-restructuring at interest rate of 11.45%.

Similarly, the PNB loan of 163.81 crore @ 12.25% p.a was switched over at interest rate of 8.08% p.a. during FY 2018-19 and the benefit was claimed during the true-up of FY 2018-19 but again in the true-up of FY 2019-20, that loan has been shown under pre-restructuring at interest rate of 12.25%.

Thus, HPGCL is intending to claim the benefit of restructuring of loans again & again. Further, any benefit arising due to reduction in the MCLR arising out of change in market conditions shall solely be passed on to DISCOMs and shall not be covered under penalty and incentive framework.

Rejoinder filed by HPGCL:

HPGCL has never claimed any benefit arising due to reduction in the MCLR as submitted by DISCOMs. HPGCL claimed benefit according to the MYT regulation.

HPGCL claimed the **yearly** true up of interest and finance charges as per the regulation 21.1 (v) of HERC MYT Regulation, 2012. The content of the regulation are as under:

"The generating company and the licensee shall from time to time review their capital structure i.e. debt and equity and make every effort to restructure the loan portfolio as long as it results in net savings on interest. The costs associated with such re-financing shall be borne by the beneficiaries and the net savings (after deducting the cost of re-financing) shall be subjected to incentive / penalty framework as mentioned in the ***regulation 12*** *which shall be dealt with at the time of mid-year performance review/true-up."*

12. INCENTIVE AND PENALTY FRAMEWORK (a)

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

HPGCL has claimed the True up on yearly basis, in case of interest and Finance charges also, the net saving due to restructuring of loans has been claimed on yearly basis i.e. only for that year for which true up has been proposed. Benefit of restructuring of Debt Portfolio will continue till the original date of liquidation of loan (Last year of repayment of loan as per original sanctioned letter) of each respective loan that has been swapped by HPGCL.

Reply on examples quoted by Discom:

i) REC loan originally was required to be repaid as per sanction up to 15.04.2025. In the FY 2018-19, HPGCL claimed the saving of swapping restricting to that year only i.e. 2018-19. Whereas saving on swapping will continue till the original date of liquidation of loan sanction by REC.

ii) PNB loan originally was required to be repaid as per sanction up to 31.03.2026. In the FY 2018-19, HPGCL claimed the saving of swapping restricting to that year only i.e. 2018-19. Whereas saving on swapping will continue till the original date of liquidation of loan sanction by PNB.

Benefit of the restructuring of loan portfolio is to be accrued during the entire life time of balance period of loan portfolio. HPGCL is claiming benefit of savings on account of restructuring of Debt portfolio for the year for which True Up petition is being filed on yearly basis and HPGCL is not asking the benefit of future years i.e up to original date of liquidation of respective debt therefore the HPGCL has rightly claimed the True Up of interest & finance charges for FY 2019-20 .

xvi) **Details cost of oil: -** HPGCL claimed oil expenses amounting to Rs 97.63 crores for FY 2019-20 which were approved in the ARR order dated 07.03.2019 which was allowed on normative gross generation of 18466 MUs. In this regard, it is submitted that actual generation from thermal plants is 7029 MUs and total oil cost actually incurred is Rs 22.62 crores. Hence, it may be seen that actual generation is approx. 40% of the normative generation whereas saving in oil cost due to low generation is only 0.15 crores, which is not justifiable. The saving in oil cost needs to be revisited based on actual generation. Hence amount of Rs. 37.60 crores (true-up) shown by HPGCL to be passed on to Discoms on account of oil cost does not seems to be correct.

HPGCL's Reply:

The HPGCL is adopting the practice as identified by the Commission in past orders and seeking the sharing of gains as per instant MYT Regulation.

xvii) **Return on Equity: - ROE for FY2020-21 and FY 2021-22:** The Commission, vide tariff order dated 31.10.2018 & 07.03.2019 for HPGCL, has approved ROE @ 10% for FY 2018-19 & FY 2019-20 respectively. For Mid-year Performance of FY 2020-21 and for FY 2021-22, the commission is requested to consider an appropriate rate of ROE to HPGCL in order to cushion the tariff shock to the consumers.

True up of ROE for FY 2019-20:

HPGCL has claimed ROE for Rs.17.32 crore as true up for FY 2019-20 on account of force majeure event. In this regard, it is submitted that the claim of HPGCL is not justified since the non-recovery of allowed ROE was due to its lower declared availability of RGTPP-1, Hisar and DCRTPP-2, Yamuna Nagar. In case of DCRTPP-2, there was no force majeure event and RGTPP-1, Hisar was already on scheduled annual overhauling upto 28.02.2020. Thus, there was no impact of force majeure on ROE component.

HPGCL's Reply:

HPGCL is appreciating the stand taken by the Discoms by recommending RoE for FY 20-21, which the Commission has disallowed in the past on account of pandemic and HPGCL has opted for an appeal in the matter. No other ISGS's RoE has been disallowed for whole FY. Thus, HPGCL should also be treated at par with other Generators having PPA with Discoms. The HPGCL raises its claim of the RoE as per instant regulations with the request that HPGCL should be allowed to sustain financially by allowing the RoE as per regulations as extended to other generators of Discoms. Thus, RoE has rightfully claimed in the matter as per MYT Regulation. It is also the matter of the fact that the RoE is on the public money invested in HPGCL through State exchequer and is liable to get the requisite returns in the matter at par with other Generators viz APCPL/NTPC Faridabad Gas.

xviii) **Interest on Working Capital (IWC): -** HPGCL in its petition has claimed the interest on Working Capital (IWC) for the FY 2021- 22@ 9.15% (SBI MCLR @ 7.65% on 01-04-2020 + 1.50%). However, the Commission vide order dated 24.04.2020 has allowed IWC @8.65% for FY 2020-21 considering MCLR 7.40% and a margin of 125 basis point. The latest rate of SBI in the month of January 2021 is 7%. As such, it is requested that they may be allowed maximum interest on working capital for FY 2021-22 @8.25% P.A. (7.00+1.25).

For the true up of FY 2019-20, it is submitted that the interest on working capital should be as per the audited accounts and not as per normative basis as true-up exercise is based on the actual expenses and within the framework of MYT Regulations 2012. Lack of considering actual interest on working capital will unnecessarily burden the consumers with normative cost in case actual costs are lower. The rebate claimed by Discoms should also be deducted from the working capital interest cost of HPGCL in case it is included in the same.

HPGCL's Reply:

The Commission has allowed the IWC by considering the rate as applicable at the beginning of the financial year and same shall be allowed for true up in the matter on the rates only on Normative basis.

There are factors which impacts the IWC i.e. Cost of coal/Cost of Oil/O&M expenses/main Spares/Receivables. Thus, the variation in price impacts the IWC and the same has been demonstrated on normative basis in the petition.

Discoms already paying the IWC on normative basis to other generators even with 3 to 4% scheduling without seeking variation on the audited one. Therefore, the difference stance should not be taken by Discoms in the matter against HPGCL.

Thus, the IWC needs to be adjusted on the Normative basis as per Regulation 12 (a) (iv) of HERC MYT Regulation, 2012 only.

Additional submissions of DISCOMS:

As regards to the claim of HPGCL on account of true up of interest and finance charges for FY 2019-20 amounting to Rs. 6.895 crores, the commission is requested to allow the true up of interest and finance charges based on the actual declared availability of their units instead of normative availability. Any inability of HPGCL to recover the interest and finance charges on normative parameters may not be passed on to DISCOMS. E.g. the approved interest and finance charges under true-up for FY 2019-20 were Rs. 185.22 crores against which the amount that could be recovered by HPGCL due to its lower declared availability were Rs. 162.96 crore. The actual interest and finance charges of HPGCL for the said period were Rs. 102.31 crores.

Accordingly, the actual interest and finance charges recoverable from Discoms should be reduced based on the actual availability of the units of HPGCL and any inability of non-achievement of normative availability shall be borne by HPGCL.

Rejoinder filed by HPGCL:

The true up of **Interest and Finance charges** for FY 2019-20 has been claimed by HPGCL on the basis of differential amount of "Interest and Finance Charges" Recovered and Allowable amount. HPGCL has proposed the amount to be recovered for Rs. 6.895 cr i.e. the difference of Allowable and Actually Recovered.

Regarding the example pointed by Discoms, it is stated that HPGCL is proposing to recover/ demand an amount of Rs. 6.895 cr i.e. the Allowable "Interest and Finance Charges" and is not supposed to return back any amount which was not actually recovered by HPGCL.

xix) **GCV of coal to be considered "As received" basis instead of "Fired Basis": - As** per CERC Tariff Regulation, 2019, GCV of coal is to be considered "As Received Basis" with reduction of 85kcal/kg on account of variation during storage of generating station. However, as per current prevailing HERC MYT Regarding 2019, GCV of coal be considered at "Fired Basis" in line with the earlier provision in CERC regulation 2014.

In view of above, Hon'ble commission is requested to consider the GCV on ***"AS RECEIVED BASIS" instead of "FIRED BASIS"*** by amending MYT Regulation, 2019, as it will reduce the variable cost of HPGCL Plants, which will further increase their scheduling and reduction of penalty on account of short lifting of coal.

HPGCL Reply:

The Discoms are trying to modify the MYT Regulation by raising certain issues. In case the Discoms are having any issue in respect of MYT regulations, this is not the appropriate forum for raising such issue. Thus, the appropriate forum needs to be approached in the matter please.

xx) **To explore Renewable energy sources by HPGCL:-** HERC in its order dated 31.10.2018 & 07.03.2019, directed as under:

"HPGCL was directed to make efforts for optimum utilization of its Human

Resources and explore the following business options available in Renewable Energy Sector, in line with the current scenario where the shift is from thermal generation to Renewable Energy:-

a) Setting up of Small/Micro Hydro Power Plants in discussions with the irrigation department.

b) Setting up of Biomass, Biogas, Solar Power and Waste to Energy Plants in discussions HAREDA, Gaushala Ayog, Local Urban Development Body etc.

c) Setting up of rooftop solar power in Universities/ Educational Institution/Medical colleges/ Government Hospitals/ Government buildings etc.

d) Setting up of solar power plants in River Reservoir etc."

In view of above, HPGCL may explore for setting up Renewable energy-based projects especially Solar Roof Top system on their plants which shall reduce their Auxiliary consumption.

HPGCL's Reply:

HAREDA and Discoms are mandated for the RE sources and in case Govt allows HPGCL, the HPGCL surely endeavor in the matter. However, the issue raised by the Discoms is nowhere related to the instant petition.

Further, the Discoms are requested to provide the precedence in the matter for using solar roof top for reducing plant auxiliaries as they are dealing with various generators outside the State, so the same model may be envisaged for the HPGCL.

It is worth to apprise that as per new draft policy the Rooftop Solar above 10KW falls under feeding tariff, thus how the same shall be helped to reduce the Auxiliary consumption of HPGCL needs to be seen in the matter.

xxi) **Utilization of Dry Fly Ash Fund: -** As per provision of Gazette MOEFCC Notification Dated 03.11.2009, issued by MOEFCC GOI, the Revenue earned through sale of Ash Products is transferred to Dry Ash Fund. This fund is meant to be utilized towards expenditure on development of infrastructure facilities, promotion & facilitation activities for use of fly ash.

Taking into consideration of non-utilization of dry ash fund, it is requested to Hon'ble Commission to direct HPGCL to utilize the fund by incurring capital expenditure on implementation of MOEFCC norms/std i.e. capex for installation of FGD.

HPGCL's Reply:

The matter has already been and the reply of the same may be considered in the matter and the submissions made by UHBVN needs to be rejected.

xxii) **Financial Implications to Haryana Discom due to deviation in Schedule and MTP by state generators during FY 2020-21:-** Haryana Discoms submit that as per "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 and Amendment (1st Amendment), 2019, the technical minimum schedule for operation of a unit or units of Intra-State coal based generating stations is to be 55% of maximum continuous rating (MCR) loading or installed capacity of the unit of the generating station, with the only exception of HPGCL's power plants at Panipat.

The Regulation 34 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 is reproduced as under:

"Technical Minimum Schedule.

Technical Minimum Schedule for operation of Intra-State Coal based Generating Stations

1. The technical minimum for operation in respect of a unit or units of an intra-State Generating Station, except HPGCL's power plants at Panipat, shall be 55% of MCR loading or installed capacity of the unit of at generating station. Provided that the above provision in the Regulation shall continue as an option available to the Commission and shall be implemented as and when considered feasible by the Commission except for the HPGCL's power plants of old vintage at Panipat."

The Haryana Discoms are facing huge financial implications and burden due to the ineffectiveness of the state generators in operating the stations as per the schedule given. The concerns are detailed as below:

i. Ramping up and down of the power is not being done as per the schedule shared by the Discoms.

ii. Power requested is not being ramped down till minimum technical limit (MTL)

iii. The declared capacity of the plants is not being revised on real time basis with exception that only Day ahead declared capacity of plants are provided by HPGCL.

Based on the discrepancies as mentioned above, a methodology for calculation of the financial implications to the state Discoms is adopted. This covers the financial burden due to Deviation in Schedule/ MTL given and Actual power generated by the state generating stations. The methodology includes:

- Impact on DSM charges
- Increase in Power Purchase cost due to undesired additional power supply by HPGCL plants

Based on the methodology adopted, in FY 2020-21 till Dec-2020, Discoms have to bear financial loss of Rs. 10.25Cr. Month wise break-up of losses is tabulated below:

Financial Implications to Discom due to deviation in Schedule and MTP by state generators during FY 2020-21						
Months	**RGTPS Khedar (In Lacs)**	**DCRTPP YTPP (In Lacs)**	**PTPS 6 (In Lacs)**	**PTPS 7 (In Lacs)**	**PTPS 8 (In Lacs)**	**Total (In Lacs)**
April	0.0	-84.8	0.0	0.0	-0.2	-85.0
May	-5.6	-115.3	0.0	-3.4	-7.1	-131.5
June	-101.3	-18.0	0.0	0.1	-0.2	-119.4
July	-41.4	-74.6	-19.8	-8.4	-15.7	-159.9
August	0.0	-70.9	0.0	-5.8	-7.4	-84.2
September	-89.1	-43.8	0.0	-4.7	-14.8	-152.4
October	-17.1	-24.5	0.0	-4.1	-10.3	-56.0
November	0.0	-42.1	0.0	0.0	0.0	-42.1
December	-19.1	-174.8	0.0	-0.8	0.0	-194.7
Total (In Lacs)	**-273.6**	**-648.8**	**-19.8**	**-27.1**	**-55.7**	**-1025.1**

It is pertinent to mention here that, during hearing on the directives dated 13.01.2021, it is admitted by HPGCL that there is no technical/financial complication to ramp down the technical minimum to 55% for DCRTPP & RGTPS plants.

In view of the above, the Commission is requested to pass suitable directions to the Petitioner to comply with the Regulations/ Schedule given by Discoms and to provide compensation to the Discoms for the financial losses incurred, thereby avoiding any such losses to the Discoms in future, which is further passed on the consumers of the state.

HPGCL's Reply:

The issue is unwarranted as the HPGCL is already adhering the MTP practices; It is also the matter of grave concern that financial implication of OD/UD also needs to be demonstrated in the matter in interest of the Consumers, so the actual implication of other generators may also be seen in the matter viz a viz HPGCL units. The UHBVN is attempting to raise the arbitrarily issue which are not the part of the petition are not required to be considered in the matter. However, once the DSM be implemented in the State, the non-adherence of the SLDC directions in respect of generation schedule leads to penalty on the Generators. The scheduling of the plants should be independently carried by SLDC Haryana as per the mandate of the Act, and remains outside the scope of Discoms to ascertain true losses on account of MTP and other issues. Till the same is not done, the issue raised by Discoms has no value.

xxiii) Further, in compliance of the Interim Order of the Commission dated 28.01.2021, HPGCL has submitted as under: -

a) Specific reasons of low availability of DCRTPP-2, in the FY 2019-20.

HPGCL's Reply:

As per schedule, DCRTPP Unit-II was on Capital Overhauling from 01.11.2019 to 14.01.2020. Unit-II got synchronized on 14.01.2020 at 10:29 hrs. But during testing of unit after capital overhauling unit tripped on "Turbine Vibration High" on 14.01.2020 at 14:57 hrs. & Unit was got revived on 11.02.2020 at 18:13 hrs. The delay in Capital Overhauling is the sole reason for low availability of DCRTPP Unit-II.

b) Average deterioration of GCV (Kcal), from the point of unloading ("received basis") to the point of firing ("as fired" basis).

HPGCL's Reply:

HPGCL is currently claiming the ECR on the basis of HERC MYT Regulation in toto. The subject cited matter was flagged by C&AG in its Performance Report on

"Fuel Management of Coal Based Stations of NTPC Limited" submitted to MoP wherein it was observed that the quality of assessment of coal has inherent as well as manmade infirmities due to heterogeneous nature of coal and sampling errors. The C&AG had also recommended that there is need to appropriately review the methods for energy pricing and had requested MoP to coordinate with CERC in light of the audit findings. The matter was referred to CEA for consultation. CEA has also examined the view taken by various stake holders for considering such loss for the purpose of tariff allowed to generators. However, as the margin would vary from plant to plant, season to season and varying coal characteristics, CEA is of the opinion that a margin of 85-100 Kcal/Kg for pit head station and a margin of 105-120 Kcal/Kg for a non-pit head station may be considered as a loss of GCV measured at wagon top till the point of firing of coal in the Boiler. Further CEA has also relied on various international papers where it has been categorically demonstrated that there is a loss of GCV in the coal stock, where coal is stored inside the power plant, mainly due to oxidation and weathering effect. Further, most of the losses in GCV during long storage of coal take place in the initial period of storage, mostly due to loss in volatile content. The reference may also be invited to the international paper "Effect of weathering on Physic-Chemical properties and Combustion behaviour of an Indian thermal Coal" written by Subhajit Aich, Barun Kumar Nandi, Sumantra Bhattacharya all from Department of Fuel and Mineral Engineering, Indian Institute of Technology (Indian School of Mines), Dhanbad, Jharkhand, where in it was clearly demonstrated that the GCV of the coal for long duration storage has been decreased drastically. The degradation in GCV is not in the control of the Generator and is in the scope of the beneficiary. More the scheduling less the retention of coal at site leads to low degradation in GCV and in optimum utilisation of resources. The same principle is applicable on all Generators, where there is less/ meagre scheduling and HPGCL is no exception to it.

Further the average GCV degradation position in HPGCL is as under:

a) DCRTPP: DCRTPP is presently maintaining the approximately 30 days Coal Stock and is using the Coal as FIFO. The average unloading GCV for the FY 2019-20 is 3614/Kcal/Kg and average GCV as fired basis is 3583.90Kcal/Kg, thus the average degradation in GCV is 30Kcal/Kg. Thus, well within the range as advised by CEA in the matter, due to small plant capacity and frequent scheduling by beneficiaries.

b) PTPS: During current FY 20-21, a quantity of 1.81 Lac MT coal has been received with average GCV 3674 Kcal/kg at unloading end, whereas consumption in 4.34 Lac MT. Thus, a quantity of 2.53 Lac MT coal has been used from previous year stock (2019-20) having average GCV 3623Kcal/Kg at unloading end. During current FY 2020-21 the average GCV is 3606 Kcal/Kg is at fired basis. Thus, the total degradation of 68 Kcal/Kg which is also well within the range as proposed by CEA.

c) RGTPP: The Plant has to maintain the Coal Stock as per HERC norms i.e. 30 days but due to meagre scheduling of units the coal remains lied in coal stock yard for considerably longer period. This leads to higher degradation of GCV of received coal and as fired basis be there for RTGPP plant due to long duration stocking of coal. The average unloading end GCV of coal is 3764 Kcal/Kg and average as fired Basis is 3524Kcal/Kg the difference is on higher side i.e. 240 Kcal/kg, the same has been identified by CEA and the paper submitted for kind reference.

In view of the aforementioned reasoning, it is clear that HPGCL meagre scheduling is the sole reason for such events of GCV degradation in the matter and is outside the scope of any Generator. However, the HERC regulation has been complied and the ECR is being declared as Fired Basis and the loss on account of Higher GCV degradation placed the HPGCL out of the alleged MoD and loss to HPGCL/ public exchequer only.

c) Measures taken to mitigate the impending coal penalties on account of short lifting of coal.

HPGCL's Reply:

HPGCL being the State Utility has made the entire endeavour to reduce the burden of coal penalties by racking the matter with the quarter concern. Even in the pandemic, on account of rigorous efforts with support of the Government, the Coal India has accepted the non-lifting of coal for April,20 & May, 20 as "Force majeure" and accordingly the burden on consumers be reduced to such extent. However, it is reiterated that the coal penalties are always pass through and the DISCOMs should make all attempt to schedule the plants in place of resorting to Short term/ Medium Term purchase of power, to avoid double implication on Consumers of the State and public money invested in the State Plants be utilized in optimum way.

d) HPGCL need to show cause, as to why the generation should not be reduced to the average of last three years and O&M expenses (R&M and A&G) should also be proportionately reduced.

HPGCL's Reply:

i) The reference is invited to Regulation 30 of MYT 2019 as under:

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

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

(b) ***A generating plant shall recover full capacity charge at the normative annual plant availability factor specified by the Commission****. Recovery of capacity charge below the level of target availability shall be on pro-rata basis. No capacity charge shall be payable at zero availability. 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;"* (Emphasis Supplied)

It is clear from the above regulations that the annual fixed charges are related to the availability of the plants and are recoverable on monthly basis subject to the availability of the plant at normative value. Thus the R&M and A&G cost is required to be recovered at Normative, as the same is required for the up keeping of the plant to its optimum level. Further, all the O&M contracts are to be made by taking the normative as the base which in turn shall be the availability of the plants for recovering of fixed cost. Further, the actual PLF of the plant is the sole responsibility of the beneficiaries and outside the scope of the Generator. Thus, reducing the R&M/A&G as per the actual is unjust and step treatment for HPGCL.

The proposed deduction of the R&M/A&G is also the clear violation of the National Tariff Policy 2016.

ii) The reference is further invited to the other plants having PPAs with the DISCOMs, where the actual PLF of the plants are far less than the HPGCL units and still they are getting all the components of the Fixed Cost at Normative as per the regulations without offering any true-up in the matter. HPPC is also taking the excess burden of PoC Charges for those plants in the matter.

iii) HPGCL is once again called the attention of the Commission that HPGCL is already supporting DISCOMs, as the plants of HPGCL Unit(s) remains under Reserve Shut Down to optimum utilise the liabilities created by DISCOMs in terms of PoC Charges and higher fixed cost of the plants on the basis of the alleged erroneous MoD system adopted by DISCOMs.

iv) It can be seen from last ARRs order of the DISCOMs, HPGCL PLF is considered at normative level for calculating the APPC of DISCOMs, and however no scheduling as per approved quantum has been carried by DISCOMs, which is clear violation of the Commission’s directive under their ARR.

v) This attempt of the DISCOMs can be seen as to get the money on the name of HPGCL and utilise it on other contracted sources or to book their losses, the reasons of the same needs to be ascertained in the matter.

vi) Even in present ARR, the Medium-Term Power/ Short Term Power scheduled by DISCOMs are at higher cost than ECR of HPGCL units, thus ambiguity is there on the way of scheduling carried by the DISCOMs and the reasons are better known to them. HPGCL has already raised the protest to segregate the scheduling of power business from DISCOMs and be given to SLDC as per mandate of IEGC.

vii) Further, It is also the admitted facts of DISCOMs in 56th SCPP meeting, where they itself submitted that Transmission Utilization Factor under contracted PPAs is only 55% and the balance 45% remains unutilized. This means that the DISCOMs has the present liability of Rs 2036 Crore (FY 19-20) in respect of PoC as per RTA, the amount of Rs 916Crore is being considered as Fixed in Nature which remains unutilized and the benefit of the same is being given to ISGS stations on the pretext of cheaper power. The same is going to be increased after adding new ISGS sources in the matter.

viii) As the fixed liabilities has already been created which are burden on the Consumer of the State, no attempt has been made by DISCOMs to reduce the burden by way of reduction in R&M /A&G charges either from ISGS stations or PGCIL, therefore, it is unjust to consider HPGCL for deduction of the R&M charges / A&G charges and makes a step treatment in the matter. The Commission should take the note of the above and direct DISCOMs to find ways & means of surrendering LTA and PPA of ISGS to gain maximum benefits for the consumer of the State instead of resorting to meagre cutting of R&M/A&G of the HPGCL.

This only leads to financial constraints for HPGCL in the matter and affects its viability of business. Further, enriching outside generators and affecting State Utility Business doesn’t reflect good in public at large, the same needs to be avoided.

ix) That the HPGCL should be allowed to recover the Fixed Charges @ Normative basis as per instant regulations and no deduction shall be made in the matter.

x) Without prejudice to the above, even if, the Commission proceed to reduce the R&M/A&G on the basis of average of last three years, then the same principle should be applied to all the power sources available with the DISCOMs, as the Section 86 (1)(b) of the Electricity Act provides the power to the

Commission to regulate the power purchase prices of all sources, by applying similar principles.

e) HPGCL has claimed Retirement benefits of employees - Rs. 356.68 Crore. However, in the Notes to Profit & Loss Account, deduction of Rs. 118.31 Crore was made. Thus, ultimately, HPGCL has booked expenditure of Rs. 238.37 Crore (Rs. 356.68 Crore minus Rs. 118.31 Crore). HPGCL, in its reply has submitted that it has been done in accordance with Accounting Standards. In this regard, HPGCL may provide its Income Tax Return for the FY 2018-19 and FY 2019-20 along with computation of income & payment proofs of expenditure of Rs. 356.68 Crore claimed by it.

HPGCL's Reply:

HPGCL has got its actuarial valuation carried out through an independent actuary. The actuarial valuation is done in accordance with IND AS 19 on Employees Benefits. The terminal liability for employees as well as retirees is assessed in two parts and is being discharged by HPGCL in two ways, firstly by funding to the trust for the claims of the pensioners being paid by the trust directly. Secondly by way of providing in HPGCL for the claims paid by HPGCL directly to employees and pensioners. Expenses on account of Pension, Leave & Gratuity are liability of HPGCL's Employees' Pension Fund Trust and liability assessed for these payments is termed as Funded Liability and are being paid by trust. On the other hand employees cost on account of Medical, Monthly Financial Assistance, LTC and Sick Leave are being paid by HPGCL directly and are being provided in HPGCL as unfunded liability. For FY2019-20, the total Terminal liability of Rs.356.68 Crores was booked by HPGCL on the basis of actuary report as under:

Particulars	Amount in Rs. Crores
Funded Liabilities to be borne by Trust :	
Pension, Gratuity & Leave Encashment	185.14
Unfunded Liabilities to be borne by HPGCL :	
Medical, Monthly Financial Assistance, LTC and Sick Leave.	171.54
TOTAL	***356.68***

It is also pertinent to mention here that in compliance with IND Accounting Standards rule, the terminal liability was reported/disclosed in P&L account for the year ended 31.03.2020 as under:

Particulars	Amount in Rs. Crores
Employee benefit Expense	238.36
Other comprehensive income/expense- Remeasurement of net defined benefits	118.31
TOTAL	**356.68**

It is further submitted that unfunded liabilities of Rs.171.54 are being paid by HPGCL as per actual in due course of time as and when the same becomes due. These payments are made in routine course of business viz. monthly financial assistance is granted on monthly basis to family of deceased employee, medical claims are settled as when the same are received from employees after due process of verification & approval. Regarding proof of payment for funded liability of Rs.185.14 Crores it is submitted that an amount of Rs.140.09 Crores has already been paid to the trust from time to time as per details enclosed. The balance amount of Rs.45.05 Crores is yet payable to the trust. It may be noted that as per Income Tax law, the due date of payments to trusts is on or before due date of filing of income tax return which is 15.02.2021 for FY 2019-20. Income Tax Return for FY 2018-19 & 2019-20 along with its computation of income and payment proofs are attached.

In Addition to the above, the petitioner vide memo no. 27/HPGCL/Reg515 dated 11.02.2021 filed an affidavit on the additional submissions made by UHBVNL on the 50 Hertz Report placed on record by HPGCL.

At the onset, HPGCL pointed out that the total cost of HPGCL's power is Rs. 4.41 / kWh as against Rs. 5.261 / kWh for ISGS Thermal Power and Rs. 6.077 / kWh for ISGS Hydro power inclusive of PoC Charges and Losses. PoC charges and Losses are not applicable on HPGCL's Power. Hence, the landed cost of power ought to be considered for dispatch.

It is also a fact that M/s 50 Hertz, the eminent persons of power sector have already done calculations, where it has been clearly demonstrated that the Normative PoC charges for Thermal is about 82 Paisa / Unit and for Hydro it is about Rs. 1.40 / kWh due to low CUF.

The Commission has taken note of the above submissions.

9 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 05.02.2021 to discuss the petition filed by the Haryana Power Utilities including HPGCL. The views of the SAC Members, relevant to HPGCL, are as under:-

The Managing Director of HPGCL informed the SAC Members that the MYT Petition of HPGCL was filed in the Commission within the timeline prescribed for the purpose by the Commission which was also made available in the public domain. He dwelt at length on the operational constraints including accelerated wear and tear of the power plants due to frequent backing down instructions of the Discoms which has also resulted in low PLF despite full availability of the machines except one unit of RGTPS. He further informed that the Capital Overhauling of one Unit of RGTPS, of Chinese origin (Sanghai Elec. Corp) was delayed due to force majeure events. Further, in the light of policy shift to "Atamnirbhar Bharat", the work for FGD has been re-tendered.

Shri V.S. Ailawadi, Member of the SAC and first Chairman of HERC, elaborated the shift in paradigm for the intra -state coal based thermal power generator in Haryana. He was of the view that given the high cost of generation including cost of coal transported from coal companies over long distance and additional expenses required to meet the strict environmental laws will make it difficult for the HPGCL power plants to figure in the Merit Order Dispatch, hence, these power plants, more often than not will remain un-scheduled. While the beneficiaries including the ultimate electricity consumers wil continue to bear the burden of fixed cost allowed by the Commission. This trend, he opined, will become more and more pronounced with larger integration of cheaper renewable power in Haryana.

In view of the above developments, he was of the firm view that HPGCL needs to conduct a thorough Cost – Benefit Analysis to establish and identify i) the HPGCL's Power Plants (Units) that can viably operate in the fast changing equations vis-à-vis hydro power, renewables and open access power that may be brought under mechanism ii) Identify and shut down the Units that may not provide viable option as evident from the actual PLF reported in the last few years so that the consumers are spared of the burden of fixed cost allowed for such plants (Units) that remain boxed up on MoD so as to reduce the cost of power purchase and electricity consumer tariffs in Haryana. Shri Ailawadi further pointed out that the R&M expenses approved by the Commission remains underutilized which does not augur well for keeping the generation assets in optimum operating conditions.

The MD of HPGCL, while appreciating the views of Shri Ailawadi, submitted that the State Government has made huge investments for creating generation assets in Haryana. He pointed out that cost transmission / wheeling including losses allowed to the power procured form outside the State is akin to the cost of coal transportation incurred by HPGCL. Hence, for the purpose of MoD it would be appropriate to consider landed cost of power instead of merit order stacking based on fuel cost / variable cost only. This would ensure scheduling of HPGCL's power plants and optimize the actual PLF and efficient operation of the plants currently under stress due to frequent start and stop instructions.

Regarding FGD the MD informed that based on the vintage of the plants two different technology i.e. wet and dry is envisaged, the latter being a cheaper option after conducting cost benefit analysis. Regarding lower R&M expenses, he informed that due to some constraints it has been on the lower side vis-à-vis that approved by the Commission. However, going forward efforts are being made to optimize the same.

Additionally, he informed the SAC Members regarding setting up of a task force to go into the issues of hybrid power i.e. bundling of conventional power with RE Power so as to bring down the average cost of HPGCL's power for the beneficiaries and consumers at large.

Shri Ailawadi opined that RE Projects could be taken up by HPGCL on the surplus land available at the existing site of the HPGCL's thermal power plants. He reiterated that in order to supply cost effective power during the evening peak, HPGCL's needs to segregate its power plants into two categories i.e Units that can provide cost effective power at competitive rate and those Units that may be un-viable to be considered for de-commissioning.

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 21.01.2021 as well as the views expressed by the SAC Members in the meeting held on 05.02.2021.

At the onset, the Commission reiterates that the present order is confined to the true up of FY 2019-20 in accordance with the HERC MYT Regulations, 2012 as well as determination of generation tariff for the FY 2021-22 in accordance with the HERC MYT Regulations, 2019. Hence, the issues pertaining to the FY 2020-21 shall be considered by the

Commission while undertaking similar exercise in the FY 2022-23 in line with the HERC MYT Regulations, 2019.

10 FY 2019-20 True-Up

The Commission has considered the submissions of the petitioner regarding ‘true up’ of various expenses for the FY 2019-20. While considering the true-up petition of HPGCL for the FY 2019-20, the actual expenditure as per the audited accounts of the FY 2019-20 vis-à-vis the expenses approved by the Commission vide its Order dated 07.03.2019 for the FY 2019-20 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, 2012 i.e. the MYT Regulations in vogue while passing the Order for the FY 2019-20.

At the onset, it is observed that HPGCL has claimed True-up of the recovered expenses vis-à-vis actual expenses, citing non-recovery of expenses due to “force majeure” conditions caused by COVID-19 pandemic and resultantly delay in capital overhauling of RGTPP-1. In this regard, the Commission observes that RGTPP-1 was expected to be available after capital overhauling on 28.02.2020, which got delayed till 05.05.2020 due to delay in receipt of material & workforce from China caused by COVID-19 pandemic.

It needs to be noted 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 follows.

11 Operation and Maintenance (O&M) Expenses

As per the provisions of the HERC MYT Regulations, 2012, regarding the basis and admissibility of truing-up, the Commission has examined the Audited Accounts of HPGCL for the FY 2019-20, true-up petition of HPGCL submitted vide memo no. 112/HPGC/Reg-515 dated 26.11.2020 and additional information submitted by HPGCL vide its letter no. 7/HPGCL/FIN/REG-515 dated 08.01.2021. It is observed that HPGCL has sought true-up amounting to 243.10 Crore on account of O&M expenses (Recovered -Rs. 625.66 Crore minus actual – Rs. 868.76 Crore).

The Commission, on perusal of the claims, observes that Employee cost (Rs. 641.36 Crore) claimed by HPGCL includes claim towards retirement benefits of employees - Rs. 356.68 Crore. However, the Commission observes that in the Note No. 33 to the Profit & Loss

Account for the FY 2019-20, a deduction of Rs. 118.31 Crore was made on account of "Net defined benefit liability". Thus, ultimately, HPGCL has booked employee cost of Rs. 238.37 Crore (Rs. 356.68 Crore minus Rs. 118.31 Crore), purported to be done in accordance with Accounting Standards. Further, note 43 (point no. 3) of the Financial Statements for the FY 2019-20 has specified that expenses recognized in the Profit & Loss account is Rs. 238.36 Crore only and expense recognized in the other comprehensive income is Rs. 118.31 Crore. However, on perusal of Statement of Profit and Loss Account for the year ending 31.03.2020, the expense of Rs. 118.31 Crore was not found to be charged. The same was even not included in the Statement of "other comprehensive income" under Note 20 of the Balance Sheet for the FY 2019-20. Instead, rather an amount of Rs. 4.51 Crore was added to Profit & Loss Account and transferred to "other comprehensive income". No plausible explanation for the same was given by the Petitioner in its petition. It may be due to the fact that some income eligible to be considered under "Non-Tariff Income" has been deducted and net amount is shown as Rs. 4.51 Crore, as has been recorded in Note 43 (point no. 22) of the Financial Statements for the FY 2019-20, which mentions that *"HPGCL has adjusted an amount of Rs. 92.94 Crore of its un-identified long outstanding balance (debit/credit) pending since long in the books of HPGCL as there was no claimant of such balance and transferred to Other Comprehensive Income in FY 2019-20."*

In view of the above, the Commission has considered Rs. 118.31 Crore as part of Employee cost and Rs. 122.82 Crore as Non-Tariff Income (being the difference of Rs. 118.31 Crore and -Rs. 4.51 Crore).

The Commission has perused the Income Tax Returns for the FY 2018-19 and FY 2019-20 along with computation of income provided by HPGCL, wherein net amount of Rs. 4.51 Crore being "Remeasurement of Defined Benefits Plan" has been offered for tax.

In this regard, the Commission observes that the Regulation 8.3 (a) & 8.3(b) of the MYT Regulations, 2012, provides as under: -

(a) The variation on account of uncontrollable items shall be treated as a pass-through subject to prudence check/validation and approval by the Commission;

…….. The items in the ARR shall be treated as "controllable" or "uncontrollable" as follows:-

ARR Element	*Controllable / Uncontrollable*
Terminal liabilities with regard to employees on account of changes in pay scales or dearness allowance due to inflation.	*Uncontrollable*

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. 641.36 Crore has been considered for true-up.

The Commission observes that HPGCL has claimed total R&M expenses amounting to Rs. 202.32 Crore, which includes additional expenditure (Rs. 19.46 Crore) on account of power drawn from Grid when the plants were not on bar, titled as "Additional Auxiliary Consumption (AAC)". 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. 19.46 Crore as claimed by HPGCL, which is beyond the four corners of the provisions of the HERC MYT Regulations, 2012.

Further, the Commission has also perused the unit-wise R&M expenses approved by the Commission and actually incurred for the FY 2019-20, as tabulated below:-

	PTPS-5	PTPS -6	PTPS -7	PTPS - 8	RGTPS 1	RGTPS 2	DCR TPS 1	DCR TPS 2	WYC	TOTAL
Approved	14.21	13.94	39.74	31.82	35.37	35.37	26.73	26.73	3.49	227.39
Actual	1.63	3.89	11.11	12.44	58.45	25.26	21.50	44.00	4.59	182.87

The Commission observes that actual R&M expenses of all the units have remained lower than the approved amount, except for RGTPS 1 and DCRTPS-2. HPGCL in its reply dated 08.01.2021 has explained that the same is due to capital overhauling of units at RGTPP Hisar & DCRTPP, Yamunanagar, undertaken in the FY 2019-20. The Commission observes that overall O&M expenses actually incurred by HPGCL has also remained within the approved amount.

Accordingly, R&M expenses i.e. Rs. 182.86 Crore (Rs. 202.32 Crore minus Rs. 19.46 Crore) is considered for true-up for the FY 2019-20.

The A&G expenses approved by the Commission for FY 2019-20 was Rs. 22.26 cr. As against this, the actual A&G expense for the year remained at Rs. 25.08 cr. The Commission observes that increase in A&G expenses is mainly attributable to the donation of Rs. 5 crore given by HPGCL to CM Corona Relief Fund on account of

outbreak of pandemic COVID 19 in March 2020. Accordingly, the Commission trues-up the same at actual level i.e. 25.08 Crore.

Thus, the actual allowable O&M expenses for the FY 2019-20 works out Rs. 849.30 Crore (Rs. 641.36 Crore + Rs. 182.86 Crore + Rs. 25.08 Crore), as against the approved O&M expenses of Rs. 697.17 Crore. Therefore, the balance O&M expenses amounting to Rs. 152.13 Crore (Rs. 697.17 Crore - Rs. 849.30 Crore) is now considered for the purpose of true up.

12 True-up of Depreciation

The Commission has carefully examined the submissions of HPGCL that the actual depreciation in the FY 2019-20 was Rs. 388.31 Crores (net of solar business - Rs. 385.03 Crores) as against the approved depreciation of Rs. 399.14 crore. It has been further submitted that the depreciation on account of capitalization of spares and decommissioning cost is Rs. 12.44 Cr. and Rs. 5.98 Cr. respectively. Hence, the net allowable depreciation for FY 2019-20 exclusive of Solar business and depreciation on spares and Decommissioning Cost is Rs. 366.61 Cr (388.31-3.28-18.42).

Therefore, the actual allowable depreciation for the FY 2019-20 works out to Rs. 366.61 Crore against the approved depreciation of Rs. 399.14 Crore. Therefore, the depreciation approved in excess amounting to Rs. 32.53 Crore (Rs. 399.14 Crore minus Rs. 366.61 Crore) is now trued up.

13 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. 105.23 Crore (net of Solar Business – Rs. 102.31 Crore) as per the audited accounts for the FY 2019-20, as against the approved interest and finance charges on loan of Rs 185.22 Crore, after passing the 50% of the savings (Rs. 59.84 Cr) to the beneficiary due to restructuring as per Regulation 21.1 (v) of HERC MYT Regulation,2012. 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 2012, 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 2019-20.

Interest and Finance charges for FY 2019-20 as per pre-restructuring Loan portfolio excluding solar business is given below: -

Particulars	Rate of Interest	Opening Bal	Drawls during year	Repayments during year	Closing Balance	Interest during year
GPF Bonds	8.65%	47.47	0	6.78	40.69	3.53
SBI DCRTPP YNR (PFC)	12.50%	633.3	0	120.64	512.66	71.62
REC	11.45%	577.24	0	75.6	501.64	66.08
State Bank of India (RGTPP)	11.45%	641.58	0	65.08	576.5	69.74
APDP Loan	12.50%	3.26	0	0.15	3.11	0.4
Punjab National Bank (Andhra Takeover)	8.65%	41.05	0	20	21.05	2.68
Punjab National Bank (Andhra Takeover Hisar)	8.65%	95.4	0	38	57.4	6.61
Punjab National Bank	12.25%	143.29	0	20.52	122.77	16.3
Total		**2182.59**	**0**	**390.19**	**1835.82**	**236.96**

HPGCL has further submitted actual Interest and Finance charges for FY 2019-20 excluding solar business as under:

Particulars	Rate of Interest	Opening Bal	Additions during year	Repayments during year	Closing Balance	Interest during year
GPF Bonds	8.00	47.47	-	6.78	40.69	3.22
SBI (DCRTPP)	9.05	273.28	-	273.28	0	9.08
REC	9.20	529.13	-	75.6	453.53	45.93
SBI(RGTPP)	9.05	138.39	-	138.39	0	4.67
APDP Loan	12.50	3.26	-	0.15	3.11	0.41
PNB(Andhra Takeover)	8.50	42.42	-	20.22	22.2	2.94
PNB(Andhra Takeover, Hisar)	8.50	95.37	-	38.44	56.93	6.83
PNB Loan	8.50	144.59	-	20.89	123.7	11.55
PNB (SBI takeover)	8.50	281.69	-	260.55	21.14	17.68
Total		**1555.6**	**0**	**834.3**	**721.3**	**102.31**

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	Recovered by HPGCL	True-up
1	**2**	**3**	**4**	**5=3+50% (4-3)**	**6**	**7=5-6**
Int.& Fin. Charges (A)	185.22	102.31	236.94	169.63	162.96	6.665
Int. On Normative Debt(B)	0	0	0	0.23	0	0.23
Total True up of Int.& Fin. Charges(A+B)	**185.22**	**102.31**	**236.94**	**169.86**	**162.96**	**6.895**

HPGCL has therefore, requested to allow Rs 6.895 Cr. as pass through of Interest & Finance charges.

In this regard, the Commission observes that interest & finance charges amounting to Rs. 185.22 Crore as claimed by HPGCL, on the basis of restructuring, were allowed for the FY 2019-20, in the Order dated 07.03.2019. HPGCL in Petition no. HERC/PRO-59 of 2018, for determination of generation tariff for the FY 2019-20, had submitted that interest expenses pre-restructuring is Rs. 261.17 Crore and post-restructuring is Rs. 141.49 Crore. On the basis of submissions of HPGCL, the Commission had approved interest & finance charges, amounting to Rs. 185.22 Crore for the FY 2019-20.

The Commission observes that HPGCL has already been allowed benefit of saving in interest amounting to Rs. 59.84 Crore due to re-structuring in its Order dated 07.03.2019, on the basis of facts and figures placed on record by HPGCL itself. The interest post restructuring projected by HPGCL in its Petition for the FY 2019-20 was Rs. 141.49 Crore, which now on actual basis has been shown as Rs. 102.31 Crore, mainly due to prepayment and general decline in the lending rates in the prevalent market scenario. In such a scenario, even if, HPGCL would have retained the loans from REC/PFC, the applicable rate of interest would have been lower. HPGCL could have negotiated the rate of interest with REC/PFC on the basis of their credit rating and State Sector borrower and get the rate of interest reduced. The reply of HPGCL in this context that these loans were governed by specific terms & conditions and interest rate was not floating, is not found convincing as these loans generally carry reset option of 3 years. The general rate of interest (before negotiation) applicable on REC loan as

on 04.04.2018 was 10.90% p.a. & PFC loan as on 15.06.2018, it was 11.40% p.a., applicable for State Sector borrower with A++ category.

Further, the Commission observes the following provisions of Regulation 12 of HERC MYT Regulations, 2012, 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*

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

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

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

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

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

(Emphasis added)

The Regulation clause 12.2 has specified 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.

HPGCL in its Petition for the FY 2019-20 has submitted that interest cost after restructuring is Rs. 141.49 Crore, which is after saving of Rs. 119.67 Crore due to such restructuring. Accordingly, HPGCL claimed 50% of such interest saving amounting to Rs. 59.84 Crore (50% of Rs. 119.67 Crore). The Commission in its Order dated 07.03.2019 (HERC/PRO-59 of 2018) had accepted the submissions of HPGCL and approved the interest cost of Rs. 185.22 Crore, after disallowing the loan to be met from Dry Fly Ash Fund i.e. Rs. 141.49 Crore + Rs. 59.84 Crore – Rs. 16.11 Crore. Thus, benefit of interest saving due to restructuring was passed on to HPGCL, in the Order dated 07.03.2019.

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 kept by HPGCL in line with Regulation clause 12.2 of HERC MYT Regulations, 2012.

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)	185.22	102.31	-82.91	-41.45	-41.45
Int. On Normative Debt(B)	0	0.23	0.23	-	0.23
Total True up of Int.& Fin. Charges(A+B)	**185.22**	**102.54**	**-82.68**	**-41.45**	**-41.23**

14 True-up of Return on Equity (ROE)

HPGCL has submitted that the Commission had approved RoE of 10% Pre-tax amounting to Rs. 210.95 crore, for the FY 2019-20. Closing Equity for the FY 2018-19, as approved in the Order dated 07.03.2019, has been taken as Opening Equity. Further, Govt. of Haryana has contributed an amount of Rs. 12.492 cr. as equity contribution during the FY 2019-20. Accordingly, the admissible RoE for the FY 2019-20, has been calculated as under:

Plants	Opening	Additions	Closing	RoE @ 10%
PTPS – 5	5.08	-	5.08	0.51
PTPS – 6	156.77	-	156.77	15.68
PTPS – 7	218.04	-	218.04	21.8
PTPS – 8	218.02	-	218.02	21.8
DCRTPP-1	247.63	3.135	250.765	24.92

Plants	Opening	Additions	Closing	RoE @ 10%
DCRTPP-2	247.58	3.135	250.715	24.91
RGTPP-1	491.80	1.574	493.374	49.26
RGTPP-2	491.24	1.573	492.813	49.2
Hydel	15.27	3.075	18.345	1.68
Total	**2,091.43**	**12.492**	**2103.922**	**209.77**

The Commission has considered the submissions of HPGCL and allows the true-up of Rs. (-) 1.18 Crore i.e. difference of approved amount of Rs. 210.95 Crore minus admissible RoE of Rs. 209.77 as proposed by the Petitioner.

15 True-up of interest on working capital

HPGCL submitted that the Commission in its Order dated 07.03.2019 regarding generation tariff for FY 2019-20 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 2019-20. Therefore, while computing the truing-up of working capital FY 2019-20, actual rate of coal and oil prevailing in FY 2019-20 has been considered.

Due to variation in the Fuel prices the normative working capital requirement for FY 2019-20, as per the approved norms of the HERC, has increased to Rs. 1869.97 Cr against the approved working capital requirement of Rs. 1767.29 cr. and consequently interest on working capital has also increased to Rs. 183.25 Cr (@ 9.8%) against the approved interest on working capital of Rs. 175.85 Cr. (@ 9.95%). Accordingly, HPGCL has sought true up of Rs. 25.68 Crore (Rs. 183.25 Crore minus Rs. 175.85 Crore plus unrecovered amount of Rs. 18.28 Crore).

The Commission has considered the above submissions and observes that the actual interest on working capital including timely payment rebate allowed to DISCOMs, as per the audited accounts is Rs. 68.90 Crore, as against the approved figure of Rs. 175.85 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. 7601.77 Crore to Rs. 4206.60 Crore. Further, the actual generation was also lower in the FY 2019-20 at 7330 MU as against the normative level of 17335 MU.

The Commission observes that there is 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.

Further, 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, 2012, 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 observes the DISCOMs have made payment to the generators in advance before the due date and deducted prepayment rebate from HPGCL, amounting to Rs. 55.60 Crore, during the FY 2019-20 which forms part of actual interest on working capital of HPGCL for the FY 2019-20 (Rs. 68.90 Crore). Excluding such rebate of Rs. 55.60 Crore, actual interest on working capital of HPGCL for the FY 2019-20 remains at

Rs. 13.30 Crore (Rs. 68.90 Crore minus Rs. 55.60 Crore), as against the approved interest on working capital of Rs. 175.85 Cr.

The Commission, in exercise of the power conferred upon it by Regulation 81 of HERC MYT Regulations, 2012 as amended from time to time, pass on the early payment rebate of Rs. 55.60 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 and HPGCL is allowed to claim true-up of actual interest on working capital amounting to Rs. 13.30 Crore only.

The Commission further observes that actual interest on working capital is Rs. 13.30 Crore only, as against the approved interest on working capital of Rs. 175.85 Cr. This is primarily due to lower generation due to backing down of HPGCL power plants, thereby needing less working capital. Accordingly, the Commission true-up the interest on working capital to the actual level of Rs. 13.30 Crore and allows the balance Rs. 162.55 Crore (Rs. 175.85 Crore – Rs. 13.30 Crore) to be pass through to the DISCOMs.

16 Cost of Oil (Secondary Fuel Oil)

HPGCL has submitted that in the FY 2019-20, they had incurred expenses on Secondary Fuel Oil amounting to Rs. 22.62 Crore. The said amount was considerably lower than the HERC approved amount of Rs. 97.63 Crore i.e. Rs. 75.01 Crore. The prime reason for low oil consumption is better operational performance & lower generation of HPGCL's Power Plants.

The Specific Fuel Oil Consumption in ml/kwh (SFC) had decreased from the approved HERC norm of 1.00 ml/kwh to 0.60 ml/kwh for PTPS-7, 0.43 ml/kwh for PTPS-8, 0.26 ml/kwh for DCRTPP-1, 0.55 ml/kwh for DCRTPP-2, 1.22 ml/kwh for RGTPP-1 and 0.84 ml/kwh for RGTPP-2, during the FY 2019-20. However, while claiming true-up of SFC, HPGCL has claimed that actual SFC remained at 0.23 ml/kwh, as against the norm of 1 ml/kwh, which apparently defies the facts. Total saving in Oil cost has been bifurcated by HPGCL into saving due to reduced price of oil (Rs. 0.04 Crore), low SFC (Rs. 74.82 Crore) and due to lower generation (Rs. 0.15 Crore).

HPGCL has further submitted that as per Regulation 12.2 (b) of HERC MYT Regulations, 2012, SFC is subjected to incentive penalty framework. Hence HPGCL has proposed to retain saving i.e Rs. 37.41 Crore (50% of Rs. 74.82 Crore) as an incentive and pass-through remaining the balance amount of Rs 37.60 Crore to the beneficiaries i.e Haryana Discoms.

The Commission, after due deliberations on this issue including the details submitted by the Petitioner, observes that as per Regulation 12.2 (b) of HERC MYT Regulations, 2012, SFC is subjected to incentive penalty framework. The savings on account of lower requirement arising out of low generation cannot not be considered as efficiency gains. Thus, the savings on account of low SFC amounting to Rs. 28.74 Crore only is on account of efficiency gains as per HERC MYT Regulations. **Consequently, HPGCL shall retain 50% of the saving in Oil cost due to improved SFC amounting to Rs. 14.37 Crore (50% of Rs. 28.74 Crore) and the balance saving in Oil cost i.e. Rs. 60.64 Crore (Rs. 75.01 Crore minus Rs. 14.37 Crore), shall be passed on to the beneficiaries / Discoms.**

17 True-up of Non-tariff Income

The Commission observes that HPGCL has reported other income (Non-operating Income) of Rs. 9.99 Crore in the FY 2019-20, as detailed below: -

Particulars		Amount (Rs. in crore)
Income from sale of scrap		1.97
Income from staff loans and advances		0.56
Income from FD with bank company etc		0.50
Delay Payment charges		0.01
Penalties recovered from contractors	3.70	6.97
Rental from the contractors	0.85	
Others	2.42	
Total		**9.99**

A perusal of the table above reveals that an amount of Rs. 4.55 crore (3.7+0.85) included in the 'other income' pertains to the contractual obligation with the O&M contractors and suppliers of HPGCL and Rs. 1.07 crore is the interest income from Staff loan/advances/FDR etc. As such HPGCL is proposing for true up of Rs. 2.275 Crore (50% of Rs. 4.55 Crore) and retaining interest income of Rs. 1.07 Crore. Balance income amounting to Rs. 6.645 Crore {Rs. (9.99 - 2.275 - 1.07) Crore} has been offered for true-up by the HPGCL.

The Commission has examined the submissions of HPGCL and observes that the issue raised by HPGCL has been deliberated and addressed by the Commission in its Order dated 31.03.2016 (HERC/PRO-30 of 2015). The relevant part of the Order of the Commission dated 31.03.2016 is reproduced as under: -

"HPGCL has been allowed Annual fixed charges and variable charges (Fuel Cost) and there is no specific provision in the MYT Regulation, 2012 regarding adjustment of Non-tariff income. 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. Since, HPGCL has already recovered excess fixed cost and offered the excess part of fixed cost recovered for write off, non-operating income needs to be reduced from true-up amount approved by the Commission."

The above stand has been pursued with by the Commission in all its subsequent Order(s) also. Accordingly, other income amounting to Rs. 8.94 Crore has been reduced from the amount eligible for true up in the present Order.

Particulars		Amount (Rs. in crore)
Income from sale of scrap		1.97
Penalties recovered from contractors	3.70	6.97
Rental from the contractors	0.85	
Others	2.42	
Total		**8.94**

Further, as discussed earlier in this Order, an amount of Rs. 122.82 Crore, representing the amount reduced from retirement benefits shown as part of Other Comprehensive Income, has been included in Non Tariff Income.

The Commission observes that HPGCL has gained an amount of Rs. 56.80 Crore from the disposal of fixed assets, as reflected in Note No. 37 of its Financial Statements for the FY 2019-20. In this regard, the Commission perused Regulation clause 46 (a) of HERC MYT Regulations, 2012, which provides as under:-

"46 (a) All incomes being incidental to electricity business and derived by the licensee from sources, including but not limited to <u>profit derived from disposal of assets</u>, rents, miscellaneous receipts from the beneficiaries, etc. shall constitute non-tariff Income of the licensee;"

(Emphasis supplied)

However, the Commission in its Order dated 24.04.2020 had directed as under:-

"The Commission has considered the above. It needs to be noted that the Commission in its Order dated 31.03.2016, had not approved unclaimed depreciation in respect of closed units of PTPS (1 to 4) due to the reason that the generation assets were not in use and hence the beneficiaries and the ultimate consumers were not getting any

benefits as such. Further, such closed units were having salvage value as well, which can be utilized to discharge any contractual obligations against the closed unit."

In view of the above, Rs. 56.80 Crore profit derived from disposal of assets, although liable to be included in Non-Tariff Income, is, at this stage, allowed to be retained by HPGCL to discharge any contractual obligations against the closed units. 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.

Accordingly, total Non-Tariff Income forming part of true-up for the FY 2019-20 is approved at Rs. 131.76 Crore (Rs. 8.94 Crore + Rs. 122.82 Crore).

In view of the above discussions, the Commission allows true-up expenses for the FY 2019-20 as under: -

(Rs. Crore)

	HPGCL (Proposed)	HERC (Allowed)
O&M Expenses	243.10	152.13
Depreciation cost	6.26	(32.53)
Interest Cost	6.89	(41.23)
ROE	17.32	(1.18)
Interest on working capital	25.68	(162.55)
Oil Cost	(37.60)	(60.64)
Non-Tariff Income	(6.65)	(131.76)
Total True-up	255.00	(277.76)
Add: Holding Cost @ 8.25% from 01.04.2020 to 31.03.2021 (12 months)		(22.91)
Total True-up including holding cost		(300.67)

Discoms i.e. UHBVNL and DHBVNL shall recover the aforesaid amount of Rs. 300.67 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, 2012. 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 non-tariff income. 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.

Capital Investment Plan (CIP) - HPGCL has submitted that the Commission vide its Order dated 24.04.2020 has disposed of HPGCL petition PRO 12 of 2020 with the directives regarding financial progress of Capex approved by the Commission including any work wise deviation from the same. Accordingly, HPGCL submitted CIP which has already been reproduced at para 5.1 of the present order. HPGCL has submitted that there are certain variations in the actual

CAPEX incurred vis-à-vis approved expenditure primarily due to revision in the overhauling schedule/ financial prudence and some of the schemes have been completed/surrendered in the FY 2019-20.

In view of the above, HPGCL, has filed a revised CIP including details of schemes completed / dropped as well as the indicative CAPEX and action taken for compliance of New Environmental Norms. . The same has been reproduced at Para 5.1 of this Order.

Additionally, HPGCL has submitted that CAPEX for of implementation of the stringent New Environmental norms is yet to be finalized after opting the best suitable option. HPGCL has already initiated the process for finalizing the same after the in-principle approval accorded by the Commission. HPGCL will approach the 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 CAPEX of the New Environmental Norms filed by the Petitioner has been re-produced earlier in the present Order.

18 Commissions Analysis & Order

The Commission in its tariff order dated 24/04/2020 in case no. HERC/PRO 58 of 2019 and considering PRO 12 of 2020 had approved Rs. 132.07 Crore for the FY 2019-20, Rs. 966.01 Crore for the FY 2020-21, Rs. 272.77 Crore for the FY 2021-22 and Rs. 81.69 Crore for the FY 2022-23. This include Capex of Rs. 4.76 crore for installation of low NOx burners and Secondary Over Fire Air (SOFA) Dampers in FY 2019-20 and Rs.47.64 crore for FY 2020-21 and Rs 26.6 crore in FY2021-22 for installation of FGDs in its plant of PTPP, DCRTPP and RGTP for which the Commission has already given in principal approval. The Commission further observes that out of the approved capital expenditure for the FY 2019-20 capital expenditure work to the tune of Rs 25.60 crore has been completed and capital expenditure work to the tune of Rs 6.50 cr has been dropped due to non-requirement.

In the revised CAPEX, HPGCL has not included CAPEX for new environmental norms; only indicative CAPEX for the same has been mentioned in the petition since the CAPEX in respect of implementation of new environmental norms is yet to be finalized. Govt of Haryana has scrapped the NIT for all the Generating Stations floated in 2019 by HPGCL for installation of FGD at HPGCL Units and directed to follow the motto of "Aatamnirbhar Bharat" and to amend the clauses of NIT to allow only participation from India based registered companies for participation as per practice followed by NTPC. The fresh NIT has been floated on Domestic Competitive Bidding mode with latest NTPC qualification criteria. It has been submitted that the Commission will be approached with its actual expenditure after completion/COD of the CAPEX.

The commission further observes that where the capital expenditure amount of Rs 35 crore spread in years from FY 2019-20 to FY 2022-23 for ERP systems and allied works has now been clubbed to Rs 31.26 crore in total to be applied in the expected year of completion i.e. FY 2021-22. Similarly, where the capital expenditure amount of Rs 20 cr spread in years from FY 2019-20 to FY 2022-23 for data center, Data recovery center has now been clubbed to Rs 13.38 crore in total to be applied in the expected year of completion i.e. FY 2021-22. The Commission further observes that schemes approved in the order dated 24/4/2020 such as Construction of DAV school RGTPS, Hisar, Installation of CCTV system RGTPS, Hisar, Replacement of damaged floor & construction of roads PTPS colony, installation of variable frequency Drive RGTPP, procurement of ID fan blades RGTPP, with approved total expenditure to Rs 11.69 cr for FY 2020-21 have now been deferred. New schemes such as Replacement of 03 Nos. Fire Tenders at RGTPP , Up gradation of hardware and software of PLC at RGTPP, Khedar, Hisar , Procurement of Complete Battery Banks Lead Acid Plante 220V, 2140AH in each Unit (Unit 1&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, renovation of centralized AC System of Unit-7&8,PTPS Panipat having budget of more than 1 cr have been introduced in the period FY 2020-21 to 2024-25.

In view of above, the Commission approves the capital expenditure for FY 2020-21 to FY 2024-25 as per the revised CIP, except for the proposed Capex for PTPS Unit – 6 filed by the petitioner as reproduced earlier in this Order.

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.

19 Technical Parameters

The Commission has considered it appropriate to address the issue of 2010 MW PTPS Unit - 6 before determining / considering the technical norms for determining generation tariff for the ensuing financial year.

The Commission observes that frequent backing down of HPGCL's Units has attracted the attention of HPGCL as well as the Commission for quite sometimes now. The Commission, in its generation tariff Order dated 29th May, 2014 (Case No. HERC / PRO – 39 of 2013) noted the submissions of HPGCL that the un-scheduled power of HPGCL could not be sold to third parties despite best efforts. Further, HPGCL had issued NIT for sale of 300 MW power during June 2013 and August 2013 but nothing could materialize. Additionally, it was submitted that efforts are being made to sell the surplus power in the Southern Regions and a team of senior officers headed by the Director / Technical of HPGCL has visited Hyderabad and Kerala for the purpose. However, nothing could materialize due to corridor constraints.

The Commission, in its Order dated 31st march, 2016 (Case No. HERC / PRO – 30 of 2015) passed the following Order:

"Regarding proposal of HPGCL that it should be given free hand in deciding the selling of surplus power of PTPS Units 5 and 6 in the open market, Commission observes that this issue was discussed with Discoms in the haring held on 23.02.2016 on ARR / Tariff petition of Discoms. The Discoms had agreed with the proposal of HPGCL in principle. Accordingly, Commission decides that Discoms shall schedule power from PTPS (Units 5 and 6) only during the peak demand season of about four months during the year, as may be agreed upon between HPGCL and Discoms, so as reduce the fixed cost burden on the Discoms at this stage. HPGCL shall be free to sell power from these Units, in the Open Market".

Further, the Commission, while determining generation tariff for the FY 2019-20 passed the following Order:-

"Further, in case, PTPS (Units 5 and 6) is able to generate above 35%, incentive shall be payable at a flat rate of 25 Paise / kWh for actual generation in excess of ex-bus energy corresponding to target Plant Load Factor".

In the light of the above, the Commission, from the data placed on record, observes that neither third party sales materialized nor incentive for generation above 35% PLF accrued. The average PLF of HPGCL Unit – 6 was 20.31% (FY 2017-18), 17.61% (FY 2018-19), 0% (FY 2019-20) and 5.63% (FY 2020-21 up to September). Hence, with new capacities tied – up by the Discoms including RE and Hydro Power as well as the up-coming Nuclear Power in Haryana, it can be said with fair degree of certainty, that PTPS Unit – 6 is unlikely to get dispatched at any time during the year. Resultantly, adding generation at PLF of 85% as proposed by HPGCL or even 35% as per Commission's previous Order, will only distort the power purchase quantum and avoidable cost thereto. It is further observed that the annual gross generation program for the FY 2019-20 and the FY 2020-21 published by the Central Electricity Authority (CEA) in consultation with the generator itself, is 2000 MUs only. The Commission is of the considered view that if PTPS Unit 7 and Unit – 8 of 250 MW each operates at a PLF of 85%, the gross generation would be 3723 MUs. As a corollary it can be deduced that PTPS Units – 6 was not envisaged to run as such. Consequently, the Commission has considered it appropriate not to consider the proposed determination of generation tariff (fixed and ECR) for PTPS Unit – 6.

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.

Annual Generation and PLF): -

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

Annual Generation Trend (MU)

Unit	2017-18	2018-19	2019-20	2020-21 (up to Sept)	Avg. Of Last 3 FY
PTPS 5	140.77	176.75	0.00	Decommissioned	-
PTPS-6	373.69	324.00	0.00	51.93	232.56
PTPS 7	1277.64	1308.75	884.46	248.33	1156.95
PTPS-8	787.37	1569.40	1088.33	266.68	1148.37
DCRTPP-1	1441.36	1346.78	1574.14	525.77	1454.09
DCRTPP-2	2006.76	1974.87	1166.89	577.89	1716.17
RGTPP-1	2361.50	1622.71	768.95	567.87	1584.39
RGTPP-2	2319.51	2229.48	1547.17	405.92	2032.05
HPGCL Thermal	10708.59	10552.74	7029.94	2695.55	9430.42
Hydel	176.75	237.68	300.03	167.33	238.15

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

Unit wise PLF Trend (%)

Unit	2017-18	2018-19	2019-20	2020-21 (up to Sept)	Avg. Of Last 3 FY
PTPS 5	7.65	9.61	0.00	Decommissioned	-
PTPS-6	20.31	17.61	0.00	5.63	12.64
PTPS 7	58.34	59.76	40.28	22.62	52.79
PTPS-8	35.95	71.66	49.56	24.29	52.39

Unit	2017-18	2018-19	2019-20	2020-21 (up to Sept)	Avg. Of Last 3 FY
DCRTPP-1	54.85	51.25	59.74	39.90	55.28
DCRTPP-2	76.36	75.15	44.28	43.86	65.26
RGTPP-1	44.93	30.87	14.59	21.55	30.13
RGTPP-2	44.13	42.42	29.36	15.40	38.64
HPGCL Thermal	44.94	44.29	29.42	24.45	39.55
Hydel	32.33	43.48	54.74	61.06	43.52

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 & 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

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 5	PTPS 6	PTPS 7	PTPS 8	DCRTPS 1	DCRTPS 2	RGTPS 1	RGTPS 2
Start-stop operations								
FY 2017-18	4	8	12	14	4	5	11	8
FY 2018-19	8	12	15	8	8	6	9	10
FY 2019-20	-	-	12	10	5	5	6	8
FY 2019-20 (upto Sep 20)	Decommissioned	2	7	7	5	7	1	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 2020-21.

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.

The Commission has appreciated the backing down problem and has made a provision for compensation for degradation of performance parameters due to running of the plant at lower loading below the norms of 85%, as per Regulation-34 under HERC MYT Regulation, 2019 in line with the CERC, IEGC Regulation.

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	2017-18	2018-19	2019-20	2020-21 (upto Sept)
PTPS – 5	77.99	89.40	100.00	Decommissioned
PTPS – 6	62.58	81.80	100.00	92.42
PTPS – 7	36.47	39.03	54.13	75.89
PTPS – 8	45.46	27.19	50.24	74.14
DCRTPP-1	21.64	18.26	41.11	60.74
DCRTPP-2	18.86	23.33	21.68	55.22
RGTPP-1	52.56	52.61	48.77	59.01
RGTPP-2	45.81	54.08	70.59	78.63

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 2020-21.

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) 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 2020-21 in line with Tariff Order dated 24.4.2020 for FY 2020-21 and for the FY 2021-22 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 acquires the skill to run these units to the minimum technical limit as required under the circumstances to remain in merit Order of scheduling of power by the Discoms.

The Commission further observes that the average PLF of last 3 years i.e. FY 2017-18, FY2019-20 & FY 2020-21 of PTPS 6, PTPS 7, PTPS 8 is 13%, 53% and 53% approximately and in the first half of FY 2020-21, their PLF is 5.63%, 22.62% and 24.29% respectively. PLF of WYC Hydel is 54.74% in FY 2019-20 and 61.06% in first half of FY 2020-21.

In view of foregoing discussions, the Commission approves NAPAF for FY 2021-22, for PTPS-7&8 and WYC Hydel 53%, 53% and 56% respectively given the achievable PLF and for other units as proposed by HPGCL in line with the HERC MYT Regulations, 2019, as under:

S.N	Unit #	Approved	Proposed		Approved
		FY 20-21	FY20-21	FY 21-22	FY 21-22
1	PTPS 6	35.00%	35.00%	85.00%	0%
2	PTPS 7	85.00%	85.00%	85.00%	53.00%
3	PTPS 8	85.00%	85.00%	85.00%	53.00%
4	DCRTPP 1	85.00%	85.00%	85.00%	85.00%
5	DCRTPP 2	85.00%	85.00%	85.00%	85.00%
6	RGTPP 1	85.00%	85.00%	85.00%	85.00%
7	RGTPP 2	85.00%	85.00%	85.00%	85.00%
8	WYC Hydel	46.00%	46.00%	46.00%	56.00%

Specific Oil Consumption / Secondary Fuel Consumption (SFC)

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

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

Unit	2017-18	2018-19	2019-20	2020-21 (up to Sept)	Avg. Of Last 3 FY
PTPS 5	4.04	2.94	0.00	Decommissioned	-
PTPS-6	2.60	1.77	0.00	5.17	1.46
PTPS 7	0.61	0.62	0.60	1.36	0.61
PTPS-8	1.26	0.36	0.43	1.19	0.68
DCRTPP-1	0.54	0.92	0.26	0.54	0.57
DCRTPP-2	0.47	0.25	0.55	0.45	0.42
RGTPP-1	0.49	0.85	1.22	0.76	0.85
RGTPP-2	0.74	0.46	0.84	1.08	0.68

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 2020-21 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	
		FY2020-21	FY 2020-21	FY 2021-22
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. Further, it is also added that HPGCL shall be allowed to recover the expenditure of excess oil consumption on account of higher Start Stop operations / low PLF beyond the limits specified in the Regulations on monthly basis through supplementary bills and the cost of the same should not be consider under the MoD being the compensation on account of higher Start Stop operations/ Low PLF.

The Commission observes that the specific oil consumption of RGTPP-1 during FY 2019-20 has been on higher side 1.22%. During FY 2020-21 till Sept. 2020, the specific oil consumption achieved in respect of PTPS-6, PTPS-7, PTPS-8, RGTPP-1 & RGTPP is 5.17%, 1.36%, 1.19%, 0.76%, 1.08% which is much above the norms. The petitioner has attributed the higher Specific Oil consumption for its plants due to low PLF due to less scheduling and more nos. of start/stop operations. HPGCL is required to devise a strategy / method to achieve the norms However, HPGCL has proposed the specific oil consumption for its plants as per norms laid down in 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	2017-18	2018-19	2019-20	2020-21 (up to Sept)
PTPS 5	9.72	9.54	*	Decommissioned
PTPS-6	8.32	8.13	*	9.69
PTPS 7	8.43	8.1	8.49	9.14
PTPS-8	8.23	7.98	8.41	8.72
DCRTPP-1	8.20	8	8.1	8.25
DCRTPP-2	7.94	8.13	8.3	7.9

Unit	2017-18	2018-19	2019-20	2020-21 (up to Sept)
RGTPP-1	5.53	5.84	6.49	5.83
RGTPP-2	5.44	5.48	5.48	5.83

* remained boxed up on account of no demand from DISCOMs.

It has been submitted that HPGCL Auxiliary consumptions (when on bar) remains within the allowable limits after considering the compensation in Auxiliary consumption as per Regulation no 34 of MYT,2019 for low loading. Further, the Additional Auxiliary Consumption (AAC) needed for keeping units available needs to be seen separately and required to be adjusted under appropriate head of fixed cost wherever the margins are available, as the same is only needed when the Units are under Reserve Shut Down.

However, HPGCL has proposed Auxiliary consumption for FY 2021-22 in line with the already approved for FY 2020-21 (except for PTPS Unit-6) by the Commission as tabulated below:

S. No.	Unit #	Approved	Proposed	
		FY 20-21	FY20-21	FY 21-22
1	PTPS 6	9.00%	10.00%	10.00%
2	PTPS 7	8.50%	8.50%	8.50%
3	PTPS 8	8.50%	8.50%	8.50%
4	DCRTPP 1	8.50%	8.50%	8.50%
5	DCRTPP 2	8.50%	8.50%	8.50%
6	RGTPP 1	6.00%	6.00%	6.00%
7	RGTPP 2	6.00%	6.00%	6.00%
8	WYC Hydel	1.00%	1.00%	1.00%

The Commission observes that for FY 2020-21 as approved for FY 2019-20 and FY 2021-22 HPGCL has proposed Auxiliary Consumption as per norms with the request to further relax the same for PTPS units 6 as 10% in place of 9%. As the Commission, after due deliberations, has decided not to determine tariff for the PTPS Unit – 6 and the same be taken up for de-commissioning with immediate effect, the issue of relaxing auxiliary energy consumption for PTPS Unit – 6 has become infructuous.

Station Heat Rate

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

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

Unit	2017-18	2018-19	2019-20	2020-21 (up to Sept)
PTPS 5	2721	2566	*	**
PTPS-6	2653	2540	*	2537

Unit	2017-18	2018-19	2019-20	2020-21 (up to Sept)
PTPS 7	2562	2473	2476	2465
PTPS-8	2551	2468	2471	2460
DCRTPP-1	2321	2327	2328	2341
DCRTPP-2	2317	2319	2333	2341
RGTPP-1	2523	2461	2476	2432
RGTPP-2	2505	2419	2442	2455

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 2021-22 has been proposed as per norms specified in HERC MYT Regulations, 2019 is as under:

SHR (kCal/kWh) FY 2020-21 and FY 2021-22

S. No	SHR (kcal/kWh)	Approved	Proposed	
		FY 2020-21	FY 2020-21	FY 2021-22
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 its plants as per norms except for RGTPS units 1 & 2 wherein the SHR is high. HPGCL attribute this higher SHR for RGTPS is low scheduling of the units due to backing down, the Commission do acknowledge this factor and advise the petitioner to run its units at optimum loading though keeping the units in service as per requirement of the Discoms. The Commission further observes that HPGCL has proposed SHR for its units at PTPS, DCRTPS and RGTPS as provided in the MYT Regulations 2019, thus, the Commission approves the same, except PTPS Unit - 6.

Gross Calorific Value (GCV) and Price of fuel

The GCV and cost of coal and secondary fuel (oil) has been proposed for FY 2021-22 as per the actual weighted average calorific value of coal for PTPS, DCRTPS and RGTPS during April to Sept. of FY 2020-21 as under: -

Gross Calorific Value and landed Coal Cost

Particulars	PTPS	DCRTPS	RGTPS
Gross Calorific Value of Coal (kcal/Kg)	3577	3380	3388
Average landed cost of Coal (Rs/MT)	4548	4564	4905

Gross Calorific Value & cost of Oil

Particulars	PTPS	DCRTPP	RGTPP
Gross Calorific Value of oil (kcal/KL)	**10524**	**10312**	**10620**
Average landed cost of oil (Rs/kL)	**38526**	**34358**	**36059**

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 2021-22.

Units	**PLF (%)**	**SHR (Kcal/kWh)**	**Aux. C (%)**	**SFC (ML/kWh)**	**Coal Cost (Rs/MT) & GCV (Kcal/kg)**	**Oil Cost (Rs / KL) & GCV (Kcal /Litre)**
PTPS - 7	53.00%	2500	8.5	0.5	4548/3577	38526/10524
PTPS - 8	53.00%	2500	8.5	0.5	4548/3577	38526/10524
DCRTPS - 1	85.00%	2344	8.5	0.5	4564/3380	34358/10312
DCRTPS - 2	85.00%	2344	8.5	0.5	4564/3380	34358/10312
RGTPS - 1	85.00%	2387	6	0.5	4905/3388	36059/10620
RGTPS - 2	85.00%	2387	6	0.5	4905/3388	36059/10620
WYC HEP	56.00%	-	1	-	-	-

Resultantly, the Energy Charges / Variable Charges for the FY 2021-22 calculated on the basis of the approved parameters / cost (Unit Wise) is presented below that follows: -

HERC Energy Charges / Variable Charges for the FY 2021-22

Parameters	Unit	Derivation	PTPS			RG TPS		DCR TPS		WYC
				Unit 7	Unit 8	Unit 1	Unit 2	Unit 1	Unit 2	
Installed Capacity (MW)				250	250	600	600	300	300	62.4
Gross Generation	MU	A		1,160.70	1,160.70	4,467.60	4,467.60	2,233.80	2,233.80	306.11
PLF (%)				53.00	53.00	85.00	85.00	85.00	85.00	56
Auxiliary Energy Consumption	%			8.50%	8.50%	6.00%	6.00%	8.50%	8.50%	1.00%
Generation (Ex-bus)	MU	A1		1062.04	1062.04	4199.54	4199.54	2043.93	2043.93	303.05
Station Heat Rate (SHR)	Kcal/kwh	B		2500	2500	2387	2387	2344	2344	
Specific Oil Consumption	ml/kwh	C		0.5	0.5	0.5	0.5	0.5	0.5	
Gross Calorific Value of Oil	Kcal/litre	D		10524	10524	10620	10620	10312	10312	
Gross Calorific Value of Coal	K.cal/Kg	E		3577	3577	3388	3388	3380	3380	NA
Overall Heat	G.cal	F=(A*B)		2901750	2901750	10664161	10664161	5236027	5236027	NA
Heat from Oil	G.cal	G=(A*C*D)/1000		6108	6108	23723	23723	11517	11517	NA
Heat from Coal	G.cal	H= (F-G)		2895642	2895642	10640438	10640438	5224510	5224510	NA
Oil Consumption	KL	I=G*1000/D=A*C		580	580	2234	2234	1117	1117	NA
Coal Consumption	MT	J=(H*1000/E)		809517	809517	3140625	3140625	1545713	1545713	NA

Parameters	Unit	Derivation	PTPS			RG TPS		DCR TPS		WYC
				Unit 7	Unit 8	Unit 1	Unit 2	Unit 1	Unit 2	
Cost of Oil per KL	Rs/KL	K		38526	38526	36059	36059	34358	34358	NA
Cost of Coal	Rs/MT	L		4548	4548	4905	4905	4564	4564	NA
Total Cost of Oil #	Rs .Mln	M=(K*I)/10^6		22.36	22.36	80.55	80.55	38.37	38.37	
Total Cost of Coal	Rs.Mln	N=(J*L)/10^6		3681.68	3681.68	15404.77	15404.77	7054.63	7054.63	NA
Total Fuel Cost	Rs.Mln	O=M+N		3704.04	3704.04	15485.32	15485.32	7093.01	7093.01	NA
Fuel Cost/Kwh	**Rs.**	**P=O/A1**		**3.49**	**3.49**	**3.69**	**3.69**	**3.47**	**3.47**	**NA**

HERC Fixed Cost Computation FY 2021-22 (Rs. Million)

EXPENSES		PTPS -7	PTPS - 8	RGTPS 1	RGTPS 2	DCR TPS 1	DCR TPS 2	WYC	TOTAL
Operation & Maintenance (O&M)									
a) R&M Expenses		135.82	135.82	257.49	257.49	311.65	311.65	30.53	1440.45
b) A&G Expenses		20.82	20.82	44.81	44.81	29.71	29.71	6.08	196.77
c) Employees Cost (excl. Employee Cost of PTPS Units 1 to 6)		732.09	732.09	1048.94	1048.94	774.30	774.30	238.73	5349.37
Total O&M (a+b+c):		**888.73**	**888.73**	**1351.23**	**1351.23**	**1115.66**	**1115.66**	**275.35**	**6986.58**
Depreciation		261.70	272.80	1036.40	1026.30	279.70	283.60	68.20	3228.70
Interest & Finance		6.60	7.00	403.80	398.90	114.30	114.30	2.80	1047.70
W/C Interest		74.34	74.42	257.68	257.68	127.40	127.40	6.15	925.09
ROE @ 10%		218.66	218.75	497.05	495.26	251.95	251.90	19.05	1952.61
Fixed Cost		**1450.03**	**1461.70**	**3546.16**	**3529.37**	**1889.01**	**1892.86**	**371.54**	**14140.68**

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

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 & 6, 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.

ITEMS	DERIVATION	PTPS		RGTPS	DCR TPS		
		Unit 7	**Unit 8**	**Unit 1 & 2**	**(Unit 1 & 2)**	**WYC**	**TOTAL**
Coal Stock	1 months	306.81	306.81	2567.46	1175.77	0	4356.85
Oil Stock	1 months	1.86	1.86	13.425	6.40	0	23.55
O&M Expenses	1 months	74.06	74.06	225.20	185.94	22.95	582.22
Maint. Spares	10%/7.5% of O&M	88.87	88.87	270.25	223.13	20.65	691.77
Receivables	1 month	429.51	430.48	3170.51	1497.32	30.96	5558.78
W/C Requirement		901.11	902.08	6246.85	3088.57	74.56	11213.17
Int (@ 8.25% (7+1.25)%		74.34	74.42	515.37	254.81	6.15	925.09

(Rs. Million)		PTPS 7	PTPS 8	RGTPS 1&2	DCR TPS	WYC	Total
Total Coal Cost		3682	3682	30810	14109	0	52282
1 months Coal		307	307	2567	1176	0	4357
Total Oil Cost		22	22	161	77	0	283
1 months Oil		2	2	13	6	0	24
O&M Expenses		889	889	2702	2231	275	6987
1 mts O&M Expenses		74	74	225.20	186	23	582
Maint. Spares (%age)		0.10	0.10	0.10	0.10	0.075	
Maint. Spares		89	89	270.25	223.13	21	692
Rec Tot VC		3704	3704	30971	14186	0	52565
1 mts VC		309	309	2581	1182	0	4380
1 mts FC		121	122	590	315	31	1178
Rec 1mt Fc+1 Vc		**430**	**430**	**3171**	**1497**	**31**	**5559**

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 of Rs. 11213.17 Million, as computed in the table above, has been considered @ of MCLR (7%) and a margin of 125 basis point. Resultantly, the allowed rate of interest for the purpose of working out interest amount has been considered @ 8.25%.

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

TARIFF	PTPS -7	PTPS - 8	RGTPS 1	RGTPS 2	DCR TPS 1	DCR TPS 2	WYC	TOTAL
Fuel Cost Rs/kWh	3.49	3.49	3.69	3.69	3.47	3.47	-	3.52
Fixed Cost Rs. Million)	1450.03	1461.70	3546.16	3529.37	1889.01	1892.86	371.54	14140.68

The recovery of fixed charges to the extent determined above, by the Commission, for the FY 2021-22 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 otherwise).

20 Other Issues raised by HPGCL:

i. Merit Order Dispatch Principle (MoD):

The Commissions has taken note of the rival stand taken by the Petitioner i.e. HPGCL and the beneficiaries i.e HPPC / Discoms on the methodology for merit order stacking of power procurement by the Distribution Licensees in Haryana. The former has argued at some length that the stacking ought to be reckoned with on the basis of landed cost of power i.e. in the case of power procured from outside Haryana charges such as PoC and losses should be added. While the latter have vehemently argued that the same ought to be done on the basis of Variable Cost only. The Commission observes that the terms of License granted to the Discoms provides as under:-

"**21 Power Procurement Procedure**

21.1 The Licensee shall in all circumstances purchase electrical capacity and/or energy in an **efficient and economical manner** (emphasis added) under a transparent procurement process as approved by the Commission and following the guidelines issued by the Commission from time to time relating to preparation of load forecasts, power procurement plan and power procurement procedure".

It is evident from the above that the Discoms are statutorily bound to procure power in efficient and economical manner i.e. quality power at least cost. From the generation / PLF including plant availability data placed on record by the Petitioner that all the operational power plants are available for dispatch at the normative PLF and sufficient coal stock is available. Due to backing down these power plants, where fixed cost is anyway payable, there is short – lifting of coal which is subject to penalty. Further, the quality of coal of the unutilized coal, in terms of GCV, also deteriorates and so the technical parameters due to the plants operating at a very low PLF. All these tantamount to sub-optimal utilization of state resources. Additionally, since HPGCL's power plants are located within the State the cost in terms of inter-state losses and inter-state transmission / PoC charges are avoided. However, in case of concluded PPA's with generators/traders outside the State of Haryana, PoC charges are unavoidable as the same is of 'fixed nature' and is levied even if no scheduling of power takes place and forms part of fixed cost. Hence, the Commission is of the considered view that the Discoms, while evaluating any new proposal for purchase of power in future, shall give due weightage to the landed cost of power at its interface with the STU. However, for scheduling of power from already concluded PPAs, merit order based on variable costs including PoC losses, as being followed across India will continue to be followed by Haryana Disoms as well.

ii**. Force Majeure (RGTPS Unit – I):**

The Petitioner has contended that the overhauling of the said Unit got delayed by 67 days i.e. instead of the scheduled completion date of 28.02.2020 the same was completed on 5.05.2020 due to Force Majeure, hence, have sought consequential relief. The Commission has considered the submissions of HPGCL, and observes that the ibid power plant is of relatively new vintage. Hence, HPGCL ought to have given due weightage to 'predictive maintenance' and also worked towards indigenous vendor development. As the power plant was not available for a prolonged period for the benefit of the electricity consumers in Haryana, hence, in the considered view of the Commission, no relief as sought by the petitioner, on this account, is admissible.

iii. **Reserve Shut Down (RSD):**

The petitioner has sought relief on account of Additional Auxiliary Consumption during Reserve Shut Down for the power drawn form the Grid. The Commission has considered the submissions and is of the view that any relief towards RSD in terms of additional auxiliary energy consumption, deterioration in heat rate etc. as may be provided in the HERC MYT Regulations, can only be quantified / verified when HPNL / SLDC frames the draft procedures and submits the same for the approval of the Commission. Hence, at this stage the Commission, in the absence of approved requisite procedure, is not inclined to consider any relief on this account.

iv. **WYC Hydro**

It has been contended that the petitioner may be allowed to recover, at the same rate, for the energy generated beyond normative CUF. The Commission has considered the submissions and observes that for WYC Hydro, neither the petition was filed under HERC RE Regulations nor this Commission has allowed / approved the same under the RE Regulations. Hence, the petitioner ought not to claim any relief by citing the provisions of the RE Regulations. Moreover, the RE Regulations in vogue does not even provide for indicative / ceiling tariff for small / micro hydro projects as the same has to be done on a project specific basis. Resultantly, full fixed cost for the WYC Hydro Projects as determined by the Commission at the normative CUF is only recoverable.

v. **DSM**

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.

21 Directives

i. De-commissioning / Closure of PTPS Unit - 6

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

ii**. Rationalisation of Coal Linkage**

The Commission observes that the coal linkage from Coal India Limited and its subsidiaries under Fuel Supply Agreement is available to HPGCL for its power plant to run on optimum rated capacity. However, due to low demand and backing down on MoD as well as de-commissioning of PTPS Units (1-5), the average PLF of HPGCL (Thermal) during the preceding three years has been only about 43.52%. Evidently, as pointed out by HPGCL, there could be short lifting of coal including penalty thereto as the coal requirements at the power plants is expected to be significantly lower vis-à-vis the situation obtaining at the time of allocation of the linkages. The Commission observes that the issue of surrendering coal linkage of 7.28 Lakh MT (ACQ) from ECL and 25.60 Lakh MT (ACQ) from MCL was also deliberated in the Steering Committee for Power Planning (SCPP). This has become all the more important given the fact that due to less scheduling of HPGCL' power plant which is expected to hold good going forward including closure of power plants of older vintage, HPGCL needs to re-assess the quantum of coal linkage that needs to be surrendered to avoid penalty for short-lifting / non-lifting of coal as pointed out by HPGCL in the present petition.

In view of the changed circumstance HPGCL is directed to review its coal requirement and submit its report to the Commission within one month from the date of this order. The report shall also include views / proposal on the quantum of surrendering of the coal linkages to the extent feasible.

iii. **Return on Equity**

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

iv. **GCV Monitoring**

The Commission observes that the quality of coal in terms of GCV, at times, deteriorates vis-à-vis the price per MT. HPGCL is directed to analyse this phenomenon in terms of cost of coal per GCV (Rs / GCV) paid to the coal companies during the preceding three years including cost of freight and transit loss of coal and submit a report to the Commission within one month from the date of this order.

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 2021-22 shall be implemented w.e.f. 01.04.2021. The Petition is accordingly disposed of.

This Order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 18th February, 2021.

Date: 18.02.2021 (Naresh Sardana) (Pravindra Singh Chauhan)
Place: Panchkula Member Member