COMMISSION'S ORDER

ON

TRUE-UP FOR FY 2018-19, MID-YEAR PERFORMANCE REVIEW FOR FY 2019-20 AND DETERMINATION OF GENERATION TARIFF FOR THE FY 2020-21

Case No. HERC/PRO-58 of 2019
Case No. HERC/PRO-12 of 2020
Case No. HERC/PRO-13 of 2020

24 April, 2020

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-58 of 2019
Case No. HERC/PRO-12 of 2020
Case No. HERC/PRO-13 of 2020

Date of Hearing	**:**	**10.02.2020**
Date of Order	**:**	**24.04.2020**

QUORUM

Shri Depinder Singh Dhesi,	**Chairman**
Shri Pravindra Singh Chauhan,	**Member**
Shri Naresh Sardana,	**Member**

INTHE MATTER OF

Petition filed by Haryana Power Generation Corporation Ltd. (HPGCL) for approval of True-up for the FY 2018-19, Mid-Year Performance Review for the FY 2019-20 and Determination of Generation Tariff for the FY 2020-2021 (58 of 2019) HERC/PRO-12 of 2020 for approval of Capital Investment Plan & HERC/PRO-13 of 2020 for approval of Business Plan).

HPGCL, Panchkula …… Petitioner

Present

1. Shri Mohammed Shayin, IAS, MD, HPGCL.
2. Shri B.B. Gupta, Controller Finance, HPGCL
3. Shri Vijay Jindal, Xen, Regulatory Affairs, HPGCL
4. Shri Amit Diwan, Controller Finance, UHBVNL
5. Shri S.S. Walia, Consultant, UHBVNL
6. Shri Gaurav Gupta, Xen, HPPC

ORDER

1 The Haryana Electricity Regulatory Commission (hereinafter referred to as HERC/ Commission), had, after following the process laid down for the purpose including public hearing, notified the Multi Year Tariff Regulations i.e. 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 (hereinafter referred to as MYT Regulations, 2019) for MYT Control period of FY 2020-21 to FY 2024-25. The said Regulations came into effect for determination of tariff w.e.f. 1st April, 2020 i.e. the beginning of the first year of the control period i.e. FY 2020-21.

2 Regulation 71 of the HERC MYT Regulations, 2019, casts statutory obligation on the intra – State Power Generation Company i.e. HPGCL to file the details of expected revenue requirement to be recovered by way of generation tariff for the ensuing year by 30th November for the consideration and determination of generation tariff under Section 62 of the Electricity Act, 2003 by the Commission.

3 HPGCL, the Petitioner herein, vide its Memo No. 1851/HPGC/FIN/Reg-495 dated 29.11.2019, submitted the present petition for approval of true-up for the FY 2018-19, and determination of Generation Tariff for the FY 2020-21 under Section 61 and 62 of Electricity Act, 2003. It has been submitted by the Petitioner that the Commission, in its previous orders, did not carry out mid-year review and has confined its generation Tariff Order (TO) to 'true up' of the previous year and tariff determination for the ensuing year. Accordingly, HPGCL has submitted the indicative data available for the FY 2019-20 for reference purpose only and not proposing Performance Review thereto. Additionally, it has been submitted that the Commission had extended the validity of the MYT, Regulation, 2012 up to FY 2019-20. Hence, in accordance with the provision of Regulation 11.6 of the HERC MYT Regulation, 2019, HPGCL has proposed 'true-up' of various expenses for the FY 2018-19 as per the applicable regulations i.e. HERC MYT Regulation, 2012 & determination of generation tariff for the FY 2020-21 as per HERC MYT Regulations, 2019 now in vogue.

4 The Commission has taken on record HPGCL's petition including the indicative data filed for the FY 2019-20. The Commission shall reckon with the data filed for the FY 2019-20 as and when the same comes up for truing – up along with the Petition for the FY 2021-22 as per the provisions of the MYT Regulations, 2019. The Business Plan as well as the Capital Investment Plan pertaining to the MYT Control Period beginning the FY 2020-21 filed separately by HPGCL has also been taken on record.

5 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. In accordance with the procedure laid down for the purpose a Public Notice was issued by HPGCL in the Newspapers, having wide circulation, for inviting objections/suggestions from the stakeholders / General Public or any interested person i.e. MYT Regulations, 2019 read with the Haryana Electricity Regulatory Commission (Conduct of Business) Regulations, 2019 as amended from time to time and Section 64 of the EA, 2003. The said public notice got published by HPGCL in the following Newspapers. The last date for filing objections was mentioned as 30th December, 2019.

Name	Language	Date of publication
Indian Express	English	04.12.2019
Dainik Bhaskar	Hindi	04.12.2019

6 Petition filed by HPGCL

6.1 Generation Tariff Proposal (HPGCL)

The generation tariff petition filed by HPGCL for consideration and approval of the Commission is presented hereunder: -

At the onset HPGCL has prayed that the Commission may consider and allow the relief as consequence of the various appeals preferred by them in Hon'ble Punjab & Haryana High Court for certain relief in the technical and financial parameters as provided in the MYT Regulations, 2012, appeal in the Hon'ble Supreme Court against Hon'ble APTEL's Order dated 31.07.2009 on certain issues relating to the FY 2007-08, appeal filed in the Hon'ble Supreme Court against Hon'ble APTEL's Order dated 1.03.2012 on issues relating to FY 2010-11, appeal filed in the Hon'ble Supreme Court against Hon'ble APTEL's order dated 18.09.2015 on issues relating to FY 2013-14 & ARR for control period 2014-17 and appeal filed in the Hon'ble APTEL against the HERC order dated 31.03.2016 on certain issues relating to recovery of fixed cost in the FY 2014-15.

HPGCL has submitted that pending final Order / Judgements in the ibid appeals, they have restricted the present proposal vis-à-vis technical and commercial parameters as per the MYT Regulations. It has been further prayed that the Commission may rectify the error apparent and allow reasonable modification in the HERC MYT Regulation, 2019 and also relax / provide relief flowing from such correction/modification.

6.2 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.

6.3 Technical Minimum Schedule

HPGCL has submitted that Minimum Technical Scheduling for HPGCL Generating Stations except PTPS as 55% of MCR, although kept optional to be implemented as and when considered feasible by the Commission, is not applicable for HPGCL as it is obligated to supply the entire power generated to the Haryana Discoms only and is not covered under Composite Scheme or under Un-Requisitioned Surplus (URS) Regulation.

6.4 Decommissioning of PTPS Unit-5

HPGCL has submitted that 210 MW PTPS Panipat Unit 5 was commissioned in March, 1989 and has completed its useful life. The Board of Directors (BoD) of HPGCL decided to retire it w.e.f. 01.11.2019 subject to approval of the Govt. Of Haryana. Consequently, HPGCL has apportioned the Employee Cost of PTPS Unit-5 to other Generating Plant in proportion to the installed capacity, for the purpose of generation tariff determination under consideration of the Commission.

6.5 New Environmental Norms – Status of installation of Flue Gas De-sulphurization (FGD) Plant and other pollution control equipments:-

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, amending/introducing the standards for emission of environmental pollutants to be followed by the Thermal Power Plants. HPGCL has submitted that a special Technical Coordinate Committee meeting of the Northern Region Power Committee (NRPC) was held on 14.09.2017 at New Delhi to prepare phasing plan for implementation of the new environmental Norms for thermal plants in the Northern Region. As an outcome of the discussions in the meeting, NRPC issued the following plan for installation of Flue Gas Desulphurization (FGD) and other pollution control equipment, in a phased manner in respect of HPGCL Plants: -

Name of Plant	Unit	Time Schedule
PTPS	Unit -6	March- April 2021
	Unit -7	Jan-Feb 2021
	Unit -8	Nov- Dec 2020
DCRTPP	Unit -1	Nov- Dec 2021
	Unit -2	Sept- Oct 2021

Name of Plant	Unit	Time Schedule
RGTPP	Unit -1	March- April 2022
	Unit -2	Jan-Feb 2022

In this regard, HPGCL has submitted that with the installation of FGD additional raw material (lime stone) will be required in the FGD i.e. around 0.2 MT/MW/day. FGD will also consume the additional power. As such Installation of FGD will also increase the O&M Expenses and Aux. Cons. Per unit cost of generation (Capacity Charges as well as Energy Charge Rate) shall increase significantly. Expected increase in auxiliary consumption on account of installation of FGD plant is around 1%. Impact on the increase in cost of generation shall be submitted in the due course of time. In the present petition, HPGCL has proposed the capital expenditure of Rs. 1008.80 Crore to be incurred on installation of FGD and other pollution control equipment during the period FY 2019-20 to 2022-23.

6.6 Additional data/details provided by HPGCL

The Commission, after initial scrutiny of the petition, sought additional data / information, the same was provided by HPGCL vide Memo no. 1874/HPGC/FIN/REG-495 dated 08.01.2020. The additional submissions of the Petitioner, in response to the Commission's Memo No. HERC / Tariff / 1121 dated 23.12.2019 is briefly presented below:-

1. Unit-wise profitability showing separately O&M expenses (Employee cost, R&M & A&G), depreciation, interest, others (showing details of other items) of HPGCL plants, for the FY 2018-19.

HPGCL's Reply

The requisite information was provided as enclosure to the reply.

2. Comparative statement of last three years, showing sanctioned posts and posts filled, bifurcating the posts filled into regular and contractual employees.

HPGCL's Reply

The requisite information was provided as enclosure to the reply.

3. The employee cost of HPGCL for the FY 2017-18 as per audited accounts was Rs. 745.94 Crore (including terminal liabilities of Rs. 485 Cr.), regarding this HPGCL had explained that it was after giving effect to the recommendations of the 7th Pay Commission, as made applicable in Haryana, allowance of gratuity benefit to employees joined after 01.01.2006 and increase in gratuity limit from Rs. 10 lacs to Rs. 20 lacs etc. Now, the same has increased, in the FY 2018-19, to Rs. 993.38 Crore (including terminal liabilities of Rs.

688.45 Crore) i.e. an increase of 33.17%.

Rs. Crore

FY	Employee Cost (excl. Terminal liabilities)	Terminal Liabilities	Total Employee cost
2015-16	250.03	132.51	382.54
2016-17	268.78	478.07 (increase of 260.78%)	746.85 (increase of 95.23%, due to reasons mentioned above)
2017-18	260.94	485.00	745.94
2018-19	304.93	688.45 (increase of 41.95%)	993.38 (increase of 33.17%)

In this regard, HPGCL while explaining the abnormal increase in terminal liability in the FY 2018-19, were asked to provide the followings: -

i) Power stations (unit-wise) Sanctioned posts vis-a-v-s actual number of employees in last three years, showing separately the employees on regular and contractual basis.

ii) Power stations (unit-wise) breakup of employee cost showing the apportionment of head office staff and terminal liabilities into various power station units.

iii) Basis & assumption taken in the valuation of terminal liabilities for the FY 2018-19 and changes therein from the FY 2017-18.

iv) A note on the efforts taken by HPGCL in reducing the employee cost particularly in the backdrop of closure of PTPS-5, no scheduling of PTPS-6 and very low PLF of RGTPP, Hisar, in the FY 2019-20.

HPGCL's Reply

The requisite information is enclosed. Further, HPGCL has submitted that Unit no. 5 of PTPS, Panipat has been phased out w.e.f. 01.11.2019. After phasing out of the Unit, all the manpower working in the Unit has been shifted to other units of PTPS and 41 officials have been transferred to WYC Hydel. The contract arrangement for outsourcing of Manpower at WYC Hydel has also not been renewed.

4. HPGCL has provided the following actual PLF: -

Unit #	2016-17	2017-18	2018-19	2019-20 (up to Sept)	Avg. Of Last 3 FY
PTPS 5	9.20	7.65	9.61	--	8.82
PTPS-6	11.93	20.31	17.61	--	16.62
PTPS 7	51.46	58.34	59.76	55.57	56.52
PTPS-8	31.52	35.95	71.66	70.61	46.37
DCRTPP-1	70.07	54.85	51.25	86.02	58.72
DCRTPP-2	60.23	76.36	75.15	75.27	70.58
RGTPP-1	37.83	44.93	30.87	22.30	37.88
RGTPP-2	34.57	44.13	42.42	22.52	40.37

Unit #	2016-17	2017-18	2018-19	2019-20 (up to Sept)	Avg. Of Last 3 FY
HPGCL Thermal	**39.60**	**44.94**	**44.29**	**39.27**	**42.94**
Hydel	37.55	32.33	43.48	58.07	37.79

However, the correspondingly deemed PLF (unit-wise) has not been provided, which is required to be provided. Further, exception report wherein full availability for any unit was not declared may also be provided.

HPGCL's Reply

The requisite information is enclosed. However, HPGCL has not provided the exception report sought by the Commission.

5. Unit wise & month wise, no. of days the plant was running under shut down (Due to tripping/ Break down), Annual/Capital Mtc. /Backing down, during FY 2017-18, FY2018-19 and FY 2019-20 (end Nov.2019).

HPGCL's Reply

The requisite information is enclosed.

6. Unit wise month wise, number of trippings due to operation faults and the time loss and number of manual tripping due to low demand / backing down for FY 2018-19 and FY 2019-20.

HPGCL's Reply

The requisite information is enclosed.

7. HPGCL has explained that O&M expenses for the FY 2018-19 has increased from Rs. 245.70 Crore (approved) to Rs. 344.71 Crore (actual) i.e. an increase of Rs. 99.01 Crore, due to creation of provision of Rs. 164.98 Crore. The provision of Rs. 164.98 Crore comprises of anticipated liabilities of M/s. Alston power (now GE power – Rs. 144.19 Crore) and SCN issued by Service Tax Department in respect of Service tax on liquidated damages (Rs. 20.79 Cr.). Further, Other debits -written off (Rs. 29.20 Crore) forms part of O&M expenses.

In this regard, HPGCL is directed to provide the following: -

i) Work undertaken by M/s. Alston Power, ledger head in the fixed asset register and how the liability of Rs. 144.19 Crore has arisen. Also explain the increase in the liability from Rs. 60.57 Crore (as shown under contingent liability) in the FY 2017-18 to Rs. 144.19 Crore in the FY 2018-19.

ii) Year-wise break-up of service tax liability of Rs. 20.79 Crore on liquidated damages for which show cause notice has been served. Also provided year-wise break-up of liquidated damages, which has been considered as non tariff income.

iii) Current status of payment of these liabilities.

iv) Details and nature of other debits written off (Rs. 29.20 Crore).

v) Nature and admissibility of loss on sale of stores (Rs. 0.84 Crore).

HPGCL's Reply

i) 110 MW PTPS Unit-2 refurbishment contract was awarded to M/s ABB (Now Alstom Power) on 23.05.1997. M/s Alstom Power unilaterally terminated the contract on 17.04.2000 and invokes the arbitration on 19.05.2001. The ledger head in Fixed Asset Register is GH 10.501 (Copy of the relevant page of the FAR is enclosed). The reason for increase of liability from Rs. 60.57 crore to Rs. 144.19 Crore is as under: -

- Rs. 60.57 Crore was the contingent liability on account of principal amount as claimed by Alstom Power.
- The amount of contingent liability before 2016 was Rs.160.0 Crores and was reduced to Rs.60 crores only after payment of Rs.100.0 crores in compliance with interim order dated 14.10.2016 (copy enclosed) of Hon'ble Supreme Court of India.
- Rs.144.19 crores is actual liability payable to Alstom Power after taking into consideration the interest to be paid (as per arbitration award) and foreign exchange variation (booked as per forex rate prevailing on 31.03.2019).

ii) The year-wise break up of service tax liability of Rs. 20.79 crore on liquidated damages is as under: -

FY	13-14	14-15	15-16	16-17	17-18	Total
LD Amount Cr.	60.52	58.78	43.08	1.79	0.34	164.51
Service tax	7.48	7.27	5.72	0.27	0.05	20.79

The assets/ work on which the liquidated damages were levied are booked with net value after adjustment of the LD as per Accounting Standard, as such LD amount was not a part of non-tariff income of the respective year.

iii) The payment is yet outstanding.

iv) The nature of the debts written off is mainly on account of wrong bookings or bad debt. The detail is enclosed.

v) Loss on sale of stores amounting to Rs. 0.84 Crore pertains to the assets of decommissioned unit PTPS 1-4. The net gain/ loss on the decommissioned assets is allowable as non-tariff income.

8. The Commission had in its Order dated 31.10.2018, had allowed the interest & finance charges amounting to Rs. 211.01 Crore as claimed by HPGCL, on the basis of restructuring. HPGCL in its Petition for determination of generation tariff for the FY 2018-19 has mentioned that interest during pre-restructuring period for the FY 2018-19 as Rs. 240.40 Crore. Further, interest during post-restructuring period for the FY 2018-19 in the Petition was mentioned as 178.18 Crore, which in the present petition has been reduced to Rs. 147.98 Crore. HPGCL need to explain the saving in the interest cost amounting to Rs. 131.02 Crore (Rs. 279 Crore - Rs. 147.98 Crore) due to reduction in rate of interest and due to average method applied while allowing interest in the ARR Order dated 31.10.2018.

HPGCL's Reply

The requisite information is enclosed.

9. Details of equity contribution of Rs. 15.63 crore received during the FY 2018-19, specifically showing the scheme for which equity has been received and whether the same is in respect of CAPEX approved by the Commission. Further, explain the same in view of the fact that there is no corresponding addition to term loans during the year. Further, in accordance with proviso to Regulation clause 19.3 of HERC MYT Regulations, 2019, the equity portion to the extent of 30% of the original cost of de-capitalised/retired asset is to be reduced from the approved equity. Accordingly, HPGCL is required to submit revised details of approved equity admissible for true-up of the FY 2018-19 and Generation Tariff for the FY 2020-21, after reducing the relevant amount for decommissioned plants.

HPGCL's Reply

The requisite information is enclosed.

10. HPGCL has claimed additional interest on working capital amounting to Rs. 10.20 Crore for the FY 2018-19 (approved IWC Rs. 187.37 Crore, actual IWC Rs. 197.57 crore). However, note 34 of the Financial Statements for the FY 2018-19 shows actual interest on

working capital amounting to Rs. 101.89 Crore only. Therefore, HPGCL may justify the claim made by it.

HPGCL's Reply

Interest on working capital is being allowed by the Commission as per the Regulation on the normative working capital requirement computed by it at the approved rate of interest. Working capital requirement for the FY 2018-19 was computed by the Commission at the actual average rate of Coal & Oil for the first half of the FY 2017-18 without considering any escalation. However actual Coal & Oil rates for FY 2018-19 remains on higher side, as such the Normative Working Capital requirement for the year has been increased to Rs. 1985.61 Cr against the approved of Rs. 1883.05 Cr. Similarly, allowable O&M cost on account of uncontrollable factor i.e. Terminal Liability as submitted in true-up claim has also increased the requirement of IWC. Accordingly, the allowable Interest on Working Capital worked out to Rs. 197.57 Cr. against the approved of Rs. 187.37 Cr. at the approved rates/ norms.

11. HPGCL is required to submit the break up of O&M expenses proposed for the FY 2020-21 in line with the HERC MYT Regulations (1st Amendment), 2019. Further, the apportionment of employee cost of PTPS-5 into the other units of HPGCL plants also be provided.

HPGCL's Reply

The requisite information is enclosed.

12. HPGCL has sought approval of the Capital investment plan for the FY 2019-20 & FY 2020-21 at Rs. 132.07 crore and Rs. 966.01 Crore, respectively. However, while claiming depreciation, the proposed additions to fixed assets have been shown as Rs. 36.40 Crore for the FY 2019-20 and Rs. 134.27 Crore for the FY 2020-21. HPGCL is directed to explain the same.

HPGCL's Reply

It has been submitted that the figure of the Capital investment in FY 2020-21 has inadvertently typed as Rs. 966.01 crore which may kindly be read as Rs. 699.01 Crore. The total Capex allowed by the Commission is by considering the approved Capita Investment plans under progress/ proposed. However, as per the regulations the depreciation is liable to be made on the Capital Scheme completed, thus HPGCL is considering the impact of depreciations on the concluded scheme in respective FY in the matter only.

13. An expenditure of Rs. 18.00 crore and Rs. 10.00 crore was planned and got approved for WYC works FY 2018-19 and FY 2019-20 respectively vide Commission's Order dated 07.03.2019. However, an expenditure of Rs. 8 crores have been proposed for FY 2019-20 in the revised capital expenditure plan. The detail of the expenditure incurred in FY2018-19 and FY2019-20(end Nov. 2019) be supplied.

HPGCL's Reply

Expenditure in FY 2018-19 for WYC:2.00 Cr. (Spares)+2.75 Cr. (Works)=4.75 Cr.

Expenditure in FY 2019-20 for WYC (Upto Nov 2019): 0.61 Cr. (Spares)

14. Capital investment of Rs. 22.00 crore and Rs. 23.00 crore was approved for FY 2018-19 and FY 2019-20 respectively for revival of 20 nos. ESP fields and repairing of balance 36 nos. ESP fields of Unit 1 & 2 DCRTPP Yamuna Nagar as per Order dated 07.03.2019 for ARR FY2019-20, however, as per the revised proposed expenditure, an amount of Rs. 19 crores have been proposed for revival of 20 nos. ESP fields and repairing of balance 36 nos. ESP fields of unit 2 DCRTPS Yamuna Nagar in FY 2019-20. The detail scope of work and expenditure in FY 2018-19 be provided.

HPGCL's Reply

Expenditure in FY 2018-19 for DCRTPS (ESP repair): Rs. 10.51 Crore (Spares) + Rs. 3.15 Cr. (Works)=13.66 Cr. The above partial cost incurred on the scheme is only the value of spares and works carried by HPGCL in Unit-1, however, the IDC/IEDC component has not been considered at present, the same shall be claimed only after the completion of the Scheme with the approval of the commission. The copy of the work order is enclosed.

15. HPGCL has sought additional capex in order to implement FGD norms, amounting to Rs. 540 Crore for RGTPP, Hisar (600x2 MW), Rs. 285 Crore for DCRTPP (300x2 MW), Rs. 31 Crore for PTPS-6 (210 MW) and Rs. 73.80 Crore for PTPS-7&8 (250x2 MW). In this regard, the guiding norms specified by CEA vide letter no. 44/FGD/UAMPP/2019/368 dated 15.04.2019, may be referred to, in which the following norms for CAPEX have been specified: -

Capacity Group (MW)	Lakh per MW
210	45

Capacity Group (MW)	Lakh per MW
250	45
300	43.5
500	40.5
525	40.5
600	37
660	37
800	30
830	30

In this regard, HPGCL is directed to provide justification of the expenses proposed in their Petition, duly supported by approved DPR. Additionally, a note on the options available and adopted towards meeting Environment Norms by other Thermal Power Plants e.g. NTPC Dadri Thermal, may also be provided.

Further, as per Regulation clause no. 4.3 (viii) of HERC MYT Regulations, 2019, specifies as under:-

"Assessment of financial and physical progress of Capital Expenditure under each head vis-a-vis the schedule submitted and approved by the Commission. In case of any deviation in Capital Expenditure including Capitalisation, the generating company / Licensee shall submit a detailed justification at the time of truing-up."

Further, as per Regulation clause no. 18.1 A of HERC MYT Regulations, 2019, specifies as under: -

"Where the capital cost considered in tariff by the Commission on the basis of projected additional capital expenditure exceeds the actual additional capital expenditure incurred on year to year basis by more than 10%, the generating company or the transmission licensee shall refund to the beneficiaries or the long term transmission customers as the case may be, the tariff recovered corresponding to the additional capital expenditure not incurred, as approved by the Commission, along with interest at 1.20 times of the bank rate as prevalent on 1st April of the respective year."

In view of the above, HPGCL is directed to provide detailed information w.r.t. capitalization actually incurred & approved by the Commission for the FY 2018-19.

HPGCL's Reply

HPGCL has submitted that CEA has taken the CAPEX norms on the basis of 'base cost' and does not include taxes/duties and opportunity cost for interconnection. The details are enclosed.

16. The progress of JV Company incorporated in the name of Solar Urja Nigam (SUN)

formed with HSIIDC for development of Solar Parks in the State.

HPGCL's Reply

In spite of best efforts, there was no progress in development of solar park allocated to SUN, Haryana. Accordingly, Govt. of Haryana decided that SUN Haryana may be closed down and such type of projects may be taken up by HPGCL at its own independently. The requisite information is enclosed.

17. Flexibility of use of coal being supplied by various coal companies and also reviewing the transportation routes at HPGCL thermal power station for cheaper cost of coal per KWH plant wise.

HPGCL's Reply

No demurrage or short lifting of coal compensation has been paid by HPGCL during FY 2018-19 and FY 2019-20 till date.

18. Details of any demurrage paid to Railways & compensation paid by HPGCL on account short lifting of coal to Coal Companies during FY 2018-19 and FY 2019-20 (end Dec. 2019).

HPGCL's Reply

The requisite information is enclosed.

19. Progress of claim submitted and credit notes received during FY 2018-19, FY 2019-20 in respect of third-party sampling and analysis of coal by agencies appointed on Sept. 2017.

HPGCL's Reply

The requisite information is given below: -

Status of Quality Claims FY 2018-19 (Rs. In crore)				
Description		Amount of Claims settled in FY 2018-19	Claims realized (amount received) in FY 2018-19	Amount pending out of settled claims
		A	B	C=A-B
Quality	PTPS	19.42	19.42	0
	DCRTPP	49.55	37.03	12.52
	RGTPP	39.21	37.92	1.29
	Total	108.18	94.37	13.81
Status of Quality Claims FY 2019-20 upto 30.11.2019 (Rs. In crore)				
Description		Amount of Claims settled in FY 2019-20	Claims realized (amount received) in FY 2019-20	Amount pending out of settled claims
		A	B	C=A-B

Quality	PTPS	15.92	10.98	4.94
	DCRTPP	15.57	10.10	5.47
	RGTPP	26.05	9.77	16.28
	Total	57.54	30.85	26.69

20. Details of transit loss and moisture loss of coal for last three years including incentive paid to the Coal Agent.

HPGCL's Reply

A) Detail of Transit Loss of coal for last three years: -

Coal Co.	FY 2017-18	FY 2018-19	FY 2019-20 (upto Nov., 19)
CCL	0.28 %	0.53 %	-0.75 %
BCCL	1.58 %	0.36 %	-0.08 %
WCL	1.94 %	-1.74 %	2.22 %
MCL	0.45 %	0.59 %	-1.26 %
NCL	1.97 %	0.38 %	1.02 %
ECL	3.63 %	0.99 %	0.42 %
Total	0.97 %	0.46 %	0.48 %

B) Detail of moisture loss for last 3 year is **NIL as submitted by HPGCL.**

C) Detail of Incentive Paid to the Coal Agent: -

Financial Year	Amount (including GST)
2017-18	Nil
2018-19	Rs. 4.31 Crore
2019-20 (upto August 2019)	Rs. 3.82 Crore

21. Details of procurement of washed coal in the total quantum of coal procured during the last three years.

HPGCL's Reply

Nil

22. A copy of third-party energy audit (including recommendation and action taken) of HPGCL power plants.

HPGCL's Reply

The requisite information is enclosed.

23. The status of development of Kalyanpur -Badalpara coal block or allocation of an alternative coal block by Ministry of Coal.

HPGCL's Reply

The requisite information is enclosed.

24. Details of progress of ERP implementation with its commencement, targeted schedule for completion and likely date of its operationalization.

HPGCL's Reply

The requisite information is enclosed.

25. Action taken report on the suggestions of various knowledge team constituted for boiler, turbine, C& I and fuel and the improvements achieved during FY 2018-19 along with unit-wise performance indicator [PLF, Aux. Consumption. SHR and FFC for FY 2018-19 and FY 2019-20 (up to Dec 19).

HPGCL's Reply

The requisite information is enclosed.

26. HPGCL was having Rs. 346.78 Crore in Dry Fly Ash Fund at the beginning of the year 2018-19 and Rs. 53.84 Crore has been added during the FY 2018-19 on account of proceeds from sale of ash/ash products and is not treated as non-tariff income. However, only an amount of Rs. 2.86 Crore has been utilized out of this. In this regard, HPGCL may submit its plan for utilization of this fund.

HPGCL's Reply

HPGCL is making best efforts to utilize the provisioning made for the said fund as per the directives of the MoEF and making all efforts to provide the ash at the user periphery as per the demand if any. However, no separate fund has been sought in Capex for maintenance or management of the ash dyke in the matter.

27. Unit-wise saving in oil cost.

HPGCL's Reply

The requisite information is enclosed.

28. Details (including soft copy in excel) containing calculation of average GCV & Cost of Coal and Oil, for the FY 2020-21 including plant-wise monthly price store ledger (PSL) of last three months supported by copy of relevant invoices of coal for any one month.

HPGCL's Reply

The requisite information is enclosed.

29. Details of GCV in the FY 2018-19 and FY 2019-20 (year to date), as 'on fired basis'.

HPGCL's Reply

The requisite information is enclosed.

30. Copy of vender development policy framed and status report in regard to vender development (station wise) be provided.

HPGCL's Reply

HPGCL is continuously monitoring the policy in the matter and all necessary steps are being taken in the interest of the work. The copy of the policy is enclosed.

31. HPGCL was required to explore possibility for sale of its un-requisitioned power and to enter into short term/ medium term agreement with the industrial estates promoted by HSIDC / SEZS or deemed licensee i.e. MES/railway etc. The progress in this regard be submitted.

HPGCL's Reply

The requisite information is enclosed.

32. Copy of all the revenue bills (SOP, FSA, Reimbursements) along with the supporting data, so as to reconcile the same with the revenue of Rs. 5462.60 crore shown in the Audited Financial Statements for the FY 2018-19. Any item shown as other/miscellaneous is required to be elaborated in detail.

33. Status of disposal of de-commissioned plants of HPGCL be provided.

HPGCL's Reply

The requisite information is enclosed.

34. HPGCL has pointed out unfair system of Merit Order Despatches (MoD) followed by HPPC i.e. non-inclusion of PoC charges and Inter-State losses. HPGCL may provide any precedence to the contrary followed by any other State/SERC.

HPGCL's Reply

- In respect of the discrepancies in the merit order scheduling in the matter, the reference is invited to "MERIT ORDER" app managed by CEA in the matter. As per the format listed at website of under "Wings" heading "Grid Operation and Distribution", Grid Management Division & Other Reports for single merit order of the State has been listed.

- On careful perusal of the same it has been established that the Variable Cost at State Periphery (i.e. Variable Cost at the State periphery needs to be quoted considering transmission Charges and losses) needs to be considered as “Variable Cost” of the project for creating the merit order. The clarification of the above is also given at CEA website where for filing a format as under:

  “Variable Cost shall be provided at State periphery. Inter State transmission losses are to be considered for ISGS and other projects located outside state.”

- Further in line with above UPERC, vide its order 21.06.2016 in petition no 1070/2015 of Rosa Power vs UPSLDC, had adjudicated the issue of the merit order dispatch as under:

  “21. In view of above discrepancies, the Commission directs UPSLDC to immediately implement the following procedure for scheduling and despatch of power from the generating stations;

a. MOD has to be strictly adhered to. MOD is to be given preference over RPO, after RPO Obligations are met.

b. SLDC should draw up the Merit Order Stack based on Variable Charges of previous month as per actual invoices submitted by generator to UPPCL.

c. Variable Charges should take into account the Transmission Charges and Transmission Losses caused by each station and Fuel Adjustment Charges, if any, for the previous month for drawing the MOD stack.

d. Technical minimum for all the generating units should be followed.

e. For ISGS, technical minimum for backing down should be taken based on total schedule of all beneficiaries as per technical minimum specified by the CERC.

f. In the event of load crash or persistent low demand, before putting any unit on reserve shut down, it must be ensured that all units including storage based hydro plants, co-gen plants, thermal units and schedule of ISGS share are reduced to their respective technical minimum or the minimum capacity prescribed in the contract.

g. If system conditions require reserve shut down of any unit, after achieving technical minimum of all the units, as specified in point (d) above, it should be done based on merit order stack subject to following:

(1) Any unit taken on bar after any shut down, shall not be taken for reserve shut down for the next 72 hours.

(2) At least one unit at each generating station shall be kept operational, unless the grid condition prohibits the running of such units. Note: If the two machines are in the same merit order stack then the machine with lower start up time should be preferred.

h. When demand increase, the mirror mechanism of f and g shall be followed.

i. All thermal, hydro and co-generators (Except the RE) to fall in ABT regime. The Commission shall issue orders in respect of ABT for RE Generators.

j. The generators who are not falling under MOD stack will have the option of foregoing some part of their fixed cost for which credit will be given in their variable cost and their position in MOD stack will be revised accordingly. This will help the generators in scheduling their generation on day to day basis under MOD as well as in reducing the overall Average Power Purchase Cost (APPC) which would benefit public at large."

- The above UPERC order gives equitable field for all power generators an equitable level playing field to generate with best of their efficiency to remain in the merit order.

35. A report on the Compliance of directives given in the Order dated 07.03.2019.

HPGCL's Reply

The requisite information is enclosed.

The Commission has taken note of the reply filed by the petitioner in response to various queries / additional information sought by the Commission. The same has been kept in mind while dealing with the various parameters forming part of the present Order.

7 True-up Petition for the FY 2018-19

That Generation tariff for the FY 2018-19 was determined by the Commission vide Order dated 31.10.2018 read with corrigendum dated 15.11.2018 on the tariff Petition of HPGCL filed as per HERC MYT Regulation, 2012. The tariff was determined based on the relevant data / information available. HPGCL has now submitted the petition for truing-up for the FY 2018-19 based on the Audited Accounts for the FY 2018-19 in accordance with the regulation 13.1 of the MYT Regulations, 2012 i.e. the regulation under which the Order for the FY 2018-19 was passed by the Commission. A copy of the audited accounts for the FY 2018-19 was provided by the Petitioner.

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

7.1.1 The Petitioner has submitted the O&M Expenses, as per audited accounts for the FY 2018-19, is Rs. 1359.41 Crore (net of solar business of Rs 0.44 Crore) as against the HERC approved O&M Expenses of Rs. 697.42 Crore. The primary reason for this significant difference between the approved and actual O&M expenses amounting to Rs. 661.55 cr. (697.42 – 1358.97) is the increase in uncontrollable expenses on account of terminal liabilities included in the employees' cost.

7.1.2 It has been submitted that the actual employee cost including terminal liability as per the audited accounts for the FY 2018-19 is Rs. 993.38 Cr. as against the approved Employee cost, included in the O&M expenses, of Rs. 430.31 Cr. only. The approved Employees cost considered by Commission in the O&M expenses for FY 2018-19 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 I Sh. A. Balasubramanian, the terminal liabilities of HPGCL for the FY 2018-19 has been estimated at Rs. 688.45 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.

7.1.3 That O&M expenses other than Employees Cost i.e. R&M and A&G expenses approved by the Commission for FY 2018-19 were Rs. 245.70 cr. and 21.41 cr. The actual R&M and A&G expense for the year remained at Rs. 344.27 cr. and 21.31 respectively.

7.1.4 That actual R&M expenses are dependents upon various factors. The generating assets of HPGCL are old and require regular maintenance in order to ensure smooth and reliable operation. HPGCL has tried its best to minimize the R&M expenses by changing the overhauling schedule of the generating station and has also deferred certain work following conservative approach. However, it had to create a provision of Rs. 164.98 Cr as per details given below, which has led to the increase in the R&M expense.

a. An amount of Rs 144.19 Cr on account of amount to be paid to M/S Alston power (now GE power) due to the following:

- Arbitration award was passed against HPGCL in 2010
- Hon'ble District Court, Panchkula dismissed HPGCL's appeal in 2015
- Hon'ble Punjab & Haryana High Court has also awarded the case against HPGCL in 2016.
- However, the matter is pending with the Hon'ble Supreme Court for final verdict.

b. An amount of Rs 20.79 Cr on account of Show Cause Notice (SCN) issued by Service Tax Department. It was informed in the SCN that the Director General of GST Intelligence, Gurugram that HPGCL is liable to pay service tax on liquidated damages recovered from contractors in the period from October, 2013 to June, 2017.

The liabilities provided for is likely have to pay by HPGCL in the near future. As such aforesaid provisions are also required to be a pass-through expenditure.

7.1.5 The Petitioner has prayed that the Commission may allow the true up of the O&M cost amounting to Rs. 661.55 Cr. only i.e. the difference between the approved and actual O&M cost for the FY 2018-19 net of savings on account of A&G expenses.

7.2 True-up of Depreciation

That the Commission, as per its Order dated 31.10.2019, had approved depreciation of Rs. 367.59 Crores. The actual depreciation of HPGCL in the FY 2018-19, as per audited accounts is Rs. 385.96 Crores (net of solar business of Rs. 382.88 Crores).

The variation in the approved depreciation and net allowable depreciation for the FY 2018-19 is presented below: -

Rs. Crore

S. No.	Unit	Approved	Actual as per audited accounts*	Depreciation on GAAP Spares	Depreciation on account of Ind AS	Net allowable depreciation	Variance
A	B	C	D	E	F	G=(D-E-F)	H=(G-C)
1	PTPS –5-6	0.00	0.49	0.07	-	0.42	0.42
2	PTPS 7-8	55.21 55.21	59.67	0.42	6.95	52.29	-2.92
3	DCRTPP	105.39	107.30	1.44	1.92	103.94	-1.45
4	RGTPP	195.32	210.35	3.99	3.84	202.53	7.21
5	Hydel	11.67 11.67	5.07	0	-	5.07	-6.61
	Total	**367.59**	**382.88**	**5.92**	**12.70**	**364.25**	**-3.34**

* Excluding Solar Business of Rs. 3.08 Cr.

Depreciation for FY 2018-19 on account of capitalization of spares and Decommissioning Cost in accordance to the Ind AS, is Rs.12.70 Cr. (9.69+3.01). Net allowable Depreciation for FY 2018-19 exclusive of Solar business and depreciation on spares and Decommissioning Cost in accordance to the Ind AS is Rs. 364.25 Cr (385.96-3.08-18.62).

In view of the above, HPGCL has prayed to approve difference of Rs 3.44 Cr. as true-up of depreciation for FY 2018-19.

7.3 True-up of Interest Expenses

The Petitioner has submitted that as against the interest and finance charges on loan of Rs. 211.01 Crore approved by the Commission for the FY 2018-19, the actual amount incurred, as per the audited accounts, was Rs. 151 Crore (net of Solar Business –Rs. 147.98 Crore), entailing net saving of Rs. 31.21 Crore, on account of restructuring of its loan portfolio by HPGCL.

HPGCL submitted that it had swapped the higher interest-bearing PFC loan of Rs. 874.58 Cr. pertaining to DCRTPP and PFC loan of Rs 965.48 Cr. pertaining to RGTPP during FY 2016-17.

Interest and Finance charges for FY 2018-19 as per pre-restructuring Loan portfolio excluding solar business is given below: -

Pre-Restructuring Loan Portfolio &Repayments schedule for FY 2018-19 (Rs. Cr.)

Particulars	Rate of Interest	Opening Bal	Drawls during the year	Repayments during the year	Closing Balance	Interest during the year
GPF Bonds	7.28%	54.26	0.00	6.78	47.47	3.70
SBI DCRTPP YNR	12.50%	753.94	0.00	120.64	633.30	86.70
REC	12.25%	659.70	0.00	82.46	577.24	75.76
State Bank of India (RGTPP)	11.45%	743.22	0.00	101.64	641.58	79.28
APDP Loan	12.50%	3.40	0.00	0.15	3.26	0.43
Punjab National Bank (Andhra Takeover)	8.65%	61.05	0.00	20.00	41.05	4.42
Punjab National Bank (Andhra Takeover Hisar)	8.65%	133.40	0.00	38.00	95.40	9.90
Punjab National Bank	12.25%	163.81	0.00	20.52	143.29	18.81
Total	**11.73%**	**2572.78**	**0.00**	**390.19**	**2182.59**	**279.00**

Actual Loan Portfolio and Int. & Fin. Charges for FY 2018-19 (Rs. Cr.)

Particulars	Rate of Interest	Opening Bal	Additions during year	Repayments during year	Closing Balance	Interest during year
GPF Bonds	7.28%	54.26	-	6.78	47.47	3.70

Particulars	Rate of Interest	Opening Bal	Additions during year	Repayments during year	Closing Balance	Interest during year
PFC Loan (DCRTPP)	8.19%	391.99	-	120.66	271.35	27.15
REC (RGTPP)	9.08%	604.71	-	75.60	529.11	51.50
APDP Loan	12.50%	3.40	-	0.15	3.26	0.43
Andhra Bank (Misc. Capex)	8.65%	61.05	-	20.11	41.05	6.15
Andhra Bank (RGTPP)	8.65%	133.40	-	38.24	95.40	13.19
PFC Loan (RGTPP)	7.91%	213.14	-	74.22	138.92	13.92
PNB Loan	8.32%	163.81	-	20.52	143.29	12.78
PNB Loan	8.08%	324.28	-	44.80	279.48	24.40
Total	**8.46%**	**1950.05**	**0.00**	**400.71**	**1549.34**	**147.98**

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)	211.01	147.98	279.00	213.49	2.47
Int. On Normative Debt(B)	0	0	0	0.23	0.23
Total True up of Int.& Fin. Charges(A+B)	**211.01**	**147.98**	**279.00**	**213.72**	**2.70**

HPGCL therefore, has requested to allow Rs 2.70 Cr. as pass through of Interest & Finance charges.

7.4 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 2018-19. The Opening equity for FY 2018-19 has taken as closing equity of FY 2017-18 as approved by the Commission in its tariff order dated 07.03.2019. Equity addition amounting to Rs. 15.63 Cr. has been made to the opening equity in order to arrive at the closing equity of FY 2018-19 and amount of Rs. 5.43 cr. Of the equity contribution has been considered as normative debt @ 8.5% as per Regulation 19.2(b) of the MYT Regulations 2012.Therefore, only Rs. 10.20 Cr. (15.63-5.43) has been considered as net equity addition for the purpose of true-up. Accordingly, the revised equity employed for FY 2017-18 excluding PTPS unit 1 to 4 as per audited accounts is tabulated 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	217.90	0.14	218.04	21.80
PTPS – 8	217.88	0.14	218.02	21.80
DCRTPP-1	244.79	2.84	247.63	24.62
DCRTPP-2	244.74	2.84	247.58	24.62
RGTPP-1	489.69	2.11	491.80	49.07
RGTPP-2	489.12	2.11	491.24	49.02
Hydel	15.27	-	15.27	1.53
Total	**2,081.24**	**10.20**	**2,091.44**	**208.63**

Approved RoE	Actual RoE	True-up of RoE Cost
210.95	208.63	(2.32)

Hence, HPGCL has prayed that additional RoE for the FY 2018-19 amounting to Rs. 2.32 crore may be considered for truing – up.

7.5 True-up of recovery of cost of Oil

HPGCL submitted that in FY 2018-19, it had incurred oil expense amounting to Rs. 33.57 Crore, which was considerably lower than the approved amount of Rs. 72.62 Crore. However, there has been an increase in the oil rate in FY 2019-20. Accordingly, the normative oil cost at actual oil rate stands at Rs 102.56 Cr.

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. 68.73 Crore (Rs. 48.87+19.86 Cr.), computed on actual rates to the Discoms. Hence, HPGCL has requested to approve true-up of Rs. 8.96 cr. on account of oil cost for FY 2018-19.

7.6 True up of interest on working capital

HPGCL submitted that the Commission in its Order dated 31.10.2018 regarding generation tariff for FY 2018-19 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 2018-19. Therefore, while computing the truing-up of working capital FY 2018-19, actual rate of coal and oil prevailing in FY 2018-19 has been considered.

Due to variation in the Fuel prices the normative working capital requirement for FY 2018-19, as per the approved norms of the HERC, has increased to Rs. 1985.61 Cr against the approved working capital requirement of Rs. 1883.05 cr.

HERC has approved the Interest on Working Capital @ 9.95% (8.70%+1.25%). SBI Base Rate as on 01.04.2018 was 8.70%, accordingly for computing the Interest on Working Capital for the true up of FY 2018-19 has been considered @ 9.95% (8.70%+1.25%).

The table below summarizes True-up of interest on working capital for FY 2018-19.

Particular	Approved IWC (Rs. Cr.) @ 9.95%	Actual IWC (Rs. Cr.) @ 9.95%	True-up Rs. Cr.
Total	187.37	197.57	10.20

HPGCL has requested to allow the difference of Rs 10.20 Cr. as true-up of interest on working capital for FY 2018-19.

7.7 True-up of Auxiliary Consumption

HPGCL has submitted that in FY 2018-19, PTPS Units 5 & 6 and RGTPP were remained boxed-up for many months continuously, where-in they had to operate their essential auxiliary for long stretch of time by drawing power from the grid. Additionally, the cost of power so drawn by the HPGCL from the grid is being adjusted at the rate of normative Energy Charge Rate from the monthly fixed cost payable by the Discoms for the respective unit.

The Commission in its order dated 07.03.2019 has allowed for the refund of variable cost paid by HPGCL to the Discoms in FY 2017-18 on account of auxiliary consumption for the months the units were boxed-up.

Accordingly, during 2018-19 also, HPGCL has incurred variable cost to the tune of Rs. 3.89 cr. during boxing up of the units, as detailed under: -

Particular	PTPS-5	PTPS-6	RGTPP-1	RGTPP-2	Total
Aux Consumption when Boxed up (MUs)	3.29	1.14	3.90	1.93	10.26
Variable Cost (Rs per kwh)	3.40	3.40	3.44	3.44	
Variable Cost Refunded (Rs. Cr)	1.12	0.39	1.34	0.66	3.51

HPGCL has requested to allow the recovery of the energy charges amounting to Rs. 3.89 Cr. so credited to Discom during boxing up of the units.

7.8 Non-Tariff Income

Commission in its previous orders has reduced the amount of true up for FY 2016-17 and 2017-18 on account of other non-operating income as detailed below:

Non-operating income disallowed by the Commission in previous orders (Rs. Cr.)

Particulars	2016-17	2017-18
Income from sale of scrap	43.33	6.35
Income from staff welfare activity	0.06	0.03
Others income other than refund of I. Tax and interest etc.	4.74	5.82
Total	**48.13**	**12.20**

Detail of Other Non-operating income included in the other income as per the Audited Balance Sheet for the FY 2018-19 is as under:

Non-operating income for FY 2018-19 (Rs. Cr.)

Particulars		FY 2018-19
Income from sale of scrap		6.19
Income from staff loans and advances		0.51
Others income other than refund of I. Tax and interest etc.	0.00	10.99
Penalties recovered from contractors	3.99	
Rental from the contractors	1.05	
Interest income from Mutual funds	5.30	
Others	0.65	
Total		17.69

An amount of Rs. 5.04 crore (3.99+1.05) included in the other income is relating the contractual obligation with the O&M contractors and suppliers of HPGCL and Rs. 5.30 crore is the interest income from deployment of surplus funds in the short-term securities to save the IWC.

HPGCL is providing subsidized loan to its employees. It had to incur interest and finance charges on the funding of the loan released to its employees. Such interest and finance charges are not being separately allowed by the Hon'ble Commission in the allowed interest & Finance cost of HPGCL. As such recovery of the interest on loan to the employees should not be reduced from the true up of HPGCL being legitimate cost of funding.

In view of the above HPGCL proposes true up of the other non-operating income for reducing from the true up for FY 2018-19 as under:

True-up of Non-operating income for FY 2018-19 (Rs. Cr.)

Particulars		Amount (Rs. in crore)
Income from sale of scrap		6.19
Income from staff loans and advances		0
Others income (50%)		
Penalties recovered from contractors	2	5.82
Rental from the contractors	0.52	
Interest income from Mutual funds	2.65	
Others	0.65	
Total		12.01

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

Particulars	Amount (Rs. in crore)
Total True amount	663.35
Less: Non-operating income	12.01
Net True up	651.34

7.9 Total True-up for the FY 2018-19

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	Auxiliary Consumption during backing down	Non Tariff Income	Total True-up (Cr.)
661.55	**(3.34)**	**(8.96)**	**10.2**	**2.70**	**(2.32)**	**3.51**	**(12.01)**	**651.34**

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 2019-20. 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, 2020.

8 Review of Capital Expenditure

8.1 HPGCL has submitted that the Commission, in its Order dated 7th March 2019, had approved the Capital Expenditure (Capex) up to the FY 2019-20 as presented in the table below: -

Approved Capital Expenditure

S. No.	**Capital Expenditure Work**	**(Rs. Crore)**			
	Year	**2018-19**	**2019-20**	**2020-21**	**2021-22**
1	Capital Overhauling at WYC	18.00	10.00	-	
2	ERP System and allied works	10.00	25.00	-	
3	Procurement of one no. heat exchanger for Boiler Circulation Pump for RGTPP, Hisar	2	-	-	
4	Balance Payment to R-Infra against EPC contract for RGTPP, Hisar	6.70	2.73	-	
5	Procurement of PA fan blades for RGTPP Hisar	0.60	1.10	-	
6	Procurement of 2 No. Air Driers for Transport Compressors for RGTPP Hisar	-	-	0.75	
7	Trunion Bearing Housing and adopter sleeves support and guide side of APH for RGTPP Hisar	-	-	2.00	
8	Additional oxygen probes at APH inlet and outlet of Unit- I & II for RGTPP Hisar	0.45	0.80	-	
9	Arrangement of Dust Suppression system at ash dyke for RGTPP Hisar	1.00	2.00	1.50	
10	Construction of 2 no. Barracks for CISF for RGTPP Hisar	0.28	1.00	-	
11	Installation of CCTV surveillance System in RGTPP Hisar	-	2.00	-	

S. No.	Capital Expenditure Work	(Rs. Crore)			
	Year	**2018-19**	**2019-20**	**2020-21**	**2021-22**
12	Construction of DAV school in power plant colony for RGTPS Hisar	0.20	3.00	3.67	
13	Revival of Fire Fighting System of Unit6, PTPS, Panipat	-	-	0.60	
14	Replacement of PTPS Unit-6 AD Line in Ash Handling & repair D2 of ESP Field	1.00	1.20	-	
15	Replacement of damaged floor and Construction of Roads in PTPS Colony, Panipat as per new norms of Government of Haryana	1.55	-	-	
16	Up-gradation of PTPS Unit-6 HMI System of procontrol supplied by M/s BHEL	-	1.50	-	
17	Energy Management System PTPS Unit- 7-8	-	0.70	-	
18	Up gradation of existing DCS system for DCRTPP 1 & 2	4.25	-	-	
19	Revival of 20 no ESP fields and repairing of balance 36 no. ESP fields of Unit-1& 2 DCRTPP Yamunanagar	22.00	23.00	-	
20	Providing of 2 No. VFD on Unit-1 DCRTPP, 6.6KV Motor of CEP	2.3	-	-	
21	Township for DCRTPP, Yamunanagar	-	2.40	-	
22	Civil Works for WYC Hydel Project	-	7.50	-	
23	Revival of 02 Nos of ESP fields of RGTPP Unit I	5.00	3.00	-	
24	Supply, Erection, Testing and Commissioning of Energy Management System at 2x600 MW RGTPP, Khedar, Hisar	0.55	-	-	
25	Modernization of Boiler Lift for PTPS Unit 8	0.70	-	-	
26	Replacement of DAVR in DCRTPP Units 1 &2	0.75	0.75	-	
27	Providing of 2 No. VFD on Unit-II DCRTPP ,6.6KV Motor of CEP	-	2.36	-	
28	Improvement work of Cooling Towers of RGTPP Unit I & II	8.00	8.00	-	
29	Installation of Variable Frequency Drive in Condensate Extraction Pump (CEP) of RGTPP Unit I & II		5.21	-	
30	Replacement of 2 Nos. Stator of BCP of RGTPP Unit I & II	5.21	-	-	
31	Upgradation of C&I system for RGTPP Hisar	-	3.00	3.00	
32	Mobile Coal Sampling System RGTPP	-	0.66	-	
33	Installation of FGD RGTPP	-	-	314.90	314.90
34	Installation of FGD DCRTPP	-	-	251.30	251.30
35	Installation of FGD PTPS 6	-		95.00	95.00
36	Installation of FGD PTPS 7-8	-	-	209.20	209.20
37	Installation of Low NOx Burner &SOFA RGTPP	-	55.40	-	-
38	Installation of Low NOx Burner &SOFA DCRTPP	-	46.80	-	-
39	Installation of Low NOx Burner &SOFA PTPS 7-8	-	37.85	-	-
40	Up-gradation of existing PLC & SCADA at DCRTPP	-	2.25	-	-
41	Procurement of ID fan blades, RGTPP		1.40		
42	Data Center, Data Recovery centre etc. for ERP Solution	-	10.00	5.00	5.00
	Total (Rs. Crore)	**90.54**	**260.61**	**886.92**	**875.40**

8.2 It has been further submitted that procurement plan of one heat exchanger for Boiler Circulation Pump for RGTPS, Hisar has been dropped considering financial prudence. Further, works of ESP in respect of Unit-1 DCRTPS and Oxygen probe at RGTPS have also been completed in FY 2018-19. There are certain variations in the actual capex. incurred vis-a-viz HERC approved expenditure tabulated above due to revision in the overhauling schedule. In view of the above, the revised schedule of the approved capital works is presented in below for consideration and approval of the Commission: -

S. No.	Capital Expenditure Work	(Rs. Crore)			
	Year	**2019-20**	**2020-21**	**2021-22**	**2022-23**
1	Capital Overhauling at WYC	8.0	3.5	-	-
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	-

S. No.	Capital Expenditure Work	(Rs. Crore)			
	Year	**2019-20**	**2020-21**	**2021-22**	**2022-23**
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	-	-	2.0	-
7	Arrangement of Dust Suppression system at ash dyke for RGTPP Hisar	-	-	4.5	-
8	Construction of 2 no. Barracks for CISF for RGTPP Hisar	-	1.28	-	-
9	Installation of CCTV surveillance System in RGTPP Hisar	-	2.0	-	-
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 Government of Haryana	-	0.8	0.75	-
14	Up-gradation of PTPS Unit-6 HMI System of procontrol supplied by M/s BHEL	-	-	1.5	-
15	Energy Management System PTPS Unit- 7-8	-	-	0.70	-
16	Up gradation of existing DCS system for DCRTPP 1 & 2	-	4.0	-	-
17	Revival of 20 no ESP fields and repairing of balance 36 no. ESP fields of Unit- 2 DCRTPP Yamunanagar	19.0	-	-	-
18	Providing of 2 No. VFD on Unit-1 DCRTPP, 6.6KV Motor of CEP	2.3	-	-	-
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	1.5	-	-	-
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	3.50	1	11.50	-
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	-	-	-
29	Upgradation of C&I system for RGTPP Hisar	1.50	1.50	3.00	-
30	Mobile Coal Sampling System RGTPP	-	0.66	-	-
31	Installation of FGD RGTPP	36.5	327	133	43.5
32	Installation of FGD DCRTPP	23.8	172.5	65.7	23.0
33	Installation of FGD PTPS 6	2.54	28.46	-	-
34	Installation of FGD PTPS 7-8	6.25	67.55	-	-
35	Installation of Low NOx Burner &SOFA RGTPP	1.68	15.12	13.2	-
36	Installation of Low NOx Burner &SOFA DCRTPP	1.4	12.6	11.0	-
37	Installation of Low NOx Burner &SOFA PTPS 7-8	1.68	19.92	2.4	-
38	Up-gradation of existing PLC & SCADA at DCRTPP	-	-	2.25	-
39	Procurement of ID fan blades, RGTPP	-	1.68	-	-
40	Data Center, Data Recovery centre etc. for ERP Solution	2	8	5	5
	Total (Rs. Crore)	**132.07**	**966.01**	**272.77**	**81.69**

8.3 It has been submitted that the Additional Chief Secretary to Govt. Of Haryana, New &Renewable Energy Department has directed replacement of all existing inefficient lights like Halogens, Sodium Vapour, CFL, T8, T5 tube-lights and conventional bulbs with energy efficient LED lights in all the Government Buildings in the state vide letter dated 26/06/2019. To Comply with this Govt. of Haryana direction, HPGCL has to replace all its exiting inefficient lights with energy efficient LED lights. HPGCL plans to execute the replacement plan in a phased manner and meet the expenditure from the R&M expenses. As this will be additional burden on the R&M expenses, in case HPGCL is not able to meet these expenses from its allowable R&M expense due to non-availability of margin, HPGCL will approach the Commission for approval of the capital expenditure at the appropriate time.

9 HPGCL's Proposed Technical Parameters

9.1 NAPAF

The Petitioner has proposed the NAPAF of its various power plants for the FY 2019-20 and FY 2020-21 in line with HERC MYT Regulation, 2019 as under: -

NAPAF for FY 2019-20 and FY 2020-21

S. N	Unit #	Approved	Proposed	
		FY 19-20	**FY19-20**	**FY 20-21**
1	PTPS 6	35.00%	35.0%	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	43.50%	43.50%	46.00%

The Petitioner has submitted that the Commission is allowing CUF for the WYC, Hydel @50% of the availability of the machine as per the capital overhauling schedule submitted by the HPGCL. HPGCL is expecting to get its all machine overhauled up to FY 2020-21. Overhauling of last C-2 machine is expected to complete in the second quarter of the FY 2020-21 as such HPGCL is proposing for an optimistic CUF of 46% for WYC in FY 2020-21.

9.2 Auxiliary Energy Consumption

HPGCL has proposed auxiliary consumption for the FY 2020-21 as per the norms with the relaxation approved by the Commission in its earlier orders.

The auxiliary consumption approved by the Commission for FY 2019-20 and HPGCL proposed by FY 2020-21 are as under: -

S. N	Unit #	Approved	Proposed	
		FY19- 20	FY19- 20	FY 20-21
1	PTPS 6	10.00%	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%

S. N	Unit #	Approved	Proposed	
		FY19- 20	FY19- 20	FY 20-21
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 requested that the relaxation if any considered by the Hon'ble Commission in the Aux. Cons. of the plants having tube type coal mills be also applied for Generation Tariff determination for FY 2020-21.

9.3 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 2019-20and FY 2020-21

S.N	Unit #	Approved	Proposed	
		FY 19- 20	FY 19- 20	FY 20-21
1	PTPS 6	1.00	1.00	1.00
2	PTPS 7	1.00	1.00	0.50
3	PTPS 8	1.00	1.00	0.50
4	DCRTPS 1	1.00	1.00	0.50
5	DCRTPS 2	1.00	1.00	0.50
6	RGTPS 1	1.00	1.00	0.50
7	RGTPS 2	1.00	1.00	0.50

HPGCL has further requested to the Commission that new oil norms may be reviewed keeping in view of its achievability. HPGCL is committed to generate power at the minimum cost, if deem fit Hon'ble Commission may keep the new norms as a pilot study with the appropriate provision for truing up of the oil cost as per actual oil consumption restricted to existing oil norms (1.0 ml/Kwh), so that HPGCL can recover at least its legitimate oil cost.

9.4 Station Heat Rate (SHR)

The SHR for the FY 2020-21 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	FY 20	FY 21
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

9.5 Gross Calorific Value (GCV) and Price of Coal

HPGCL has proposed GCV, cost of coal and Secondary Fuel (Oil) for the FY 2020-21 as per the actual weighted average calorific value of coal/Oil for PTPS, DCRTPS and RGTPS during April to September of the FY 2019-20, as under: -

GCV & Coal Cost (FY 2020-21)

Particulars	PTPS	DCRTPS	RGTPS
Gross Calorific Value of Coal (kcal/Kg)	3810	3619	3539
Average landed cost of coal (Rs. /MT)	5118	5118	5142

GCV & Oil Cost (FY 2020-21)

Particulars	PTPS	DCRTPS	RGTPS
Gross Calorific Value of Oil (kcal/Kg)	10460	10458	10586
Average landed cost of Oil (Rs. /Kl)	51515	52736	51156

9.6 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 2020-21)

	FY 2020-21		
Fuel Cost	**Generation (Ex-bus)**	**Total cost of coal**	**Per Unit Variable cost**
	in MU	Rs. Crore	Rs/ Unit
PTPS – 6	1407.29	533.42	3.790
PTPS – 7	1703.27	623.83	3.663
PTPS – 8	1703.27	623.83	3.663
DCRTPS 1	2043.93	738.83	3.615
DCRTPS 2	2043.93	738.83	3.615
RGTPS-1	4199.54	1546.02	3.681
RGTPS-2	4199.54	1546.02	3.681
Total	17300.78	6350.78	3.671

It has been submitted that the Commission generally does not revise the Energy Charges mid-way of a year and considers the same at the time of True-up only. As such, Energy Charges for the FY 2019-20 have not been submitted / computed.

10 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 2020-21 have been proposed in line with HERC MYT Regulations, 2019 and after consideration of the submission as made by HPGCL vide its memo no.1843/HPGCL/FIN/REG-478 dated 13.11.2019. HPGCL has proposed computation of ECR as per formula given in Regulation 31C (ii) as such cost of oil has been proposed as a part of the fixed cost. In view of the above, HPGCL is projecting following components of fixed cost for the FY 2020-21.

10.1 Operation and Maintenance Expenses (O&M)

It has been submitted that HPGCL has retired its PTPS unit-5 w.e.f. 01.11.2019. The employees of the said units are being adjusted against the vacancies in other units. The employee cost of PTPS Unit-5, has been apportioned to other Generating Stations in the ratio of their respective Installed Capacities for the purpose of tariff determination.

The variation in the propose O&M expenses for FY 2019-20 and FY 2020-21 is due to change in the base year. Approved O&M expenses for FY 2019-20 were based on FY 2015-16 whereas proposed O&M expenses for FY 2020-21 is based on FY 2017-18 with escalation rate as prescribed in the HERC MYT Regulation, 2019. FY 2015-16 was the year prior to the pay revision year 2016-17 and the terminal liability in the year was considerably low as compared to the succeeding years.

In view of the above submissions, HPGCL is proposing the O&M expense for the FY 2020-21 as per the methodology adopted by the Commission in HERC MYT Regulation, 2019 as follows: -

Sr. No.	Unit	Approved FY 19-20	Proposed FY 20- 21
1	PTPS -6	131.54	122.59
2	PTPS –7	89.84	127.68
3	PTPS –8	76.94	127.68
4	DCRTPS 1	80.57	138.10
5	DCRTPS -2	80.57	138.10
6	RGTPS 1	99.84	175.715
7	RGTPS 2	99.84	175.715
8	WYC Hydel	38.54	42.30
9	**Total**	**697.66**	**1047.88**

HPGCL has submitted that a true-up of Rs. 304.50 crore was approved by the Commission for FY 2017-18 on account of employees cost and terminal liability vide its order dated 07.03.2019. The said true-up is not included in the base year cost of the FY 2015-16 and on escalating the same @ 4% p.a. it will becomes Rs. 342 cr. approx. The variation in the propose expenses for FY 2019-20 and 2020-21 is Rs. 350.20 crore is comparable to the escalated cost of the true-up.

HPGCL has that the Commission may approve the O&M expenses for FY 2020-21 Rs. 1047.86 crore.

10.2 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 for FY 2019-20 is as per the Fixed Asset Register (FAR) of FY 2018-19 and closing GFA for FY 2020-21 after considering the addition of the Capex scheme completed in the respective years is tabulated below: -

Gross Fixed Assets for FY 2020-21 (Rs. Crore)

Sr. No.	Unit	GFA as on 01.04.2019	Additions for FY 2019-20	Additions for FY 2019-20	GFA as on 31.03.2020
1	PTPS – 5	291.15	-	-	0
2	PTPS – 6	996.71	0.50	31.00	1028.21
3	PTPS –7	945.09	-	36.90	981.99
4	PTPS –8	954.59	-	37.45	992.04
5	DCRTPP 1	1132.84	12.55	2.0	1147.39
6	DCRTPP 2	1132.84	10.25	2.0	1144.66
7	RGTPP 1	2171.87	1.43	14.73	2188.03
8	RGTPP -2	2172.03	1.43	5.69	2179.15
9	WYC Hydel	**199.87**	**10.25**	**4.50**	**214.62**
10	**Total**	**9996.56**	**36.40**	**134.27**	**9876.09**

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

Sr. No.	HERC Order dt.	Detail of Asset Capitalized	Amount Capitalized	FY to which Capitalization pertains
1	31.03.2016	**GAAP Spares** PTPS 1-4 8.29 Others 146.24	154.53	FY 2014-15
2	26.04.2017	**Ind AS Spares**	144.97	Up to FY 2014-15
		Ind AS Decommissioning FTPS 0.70 PTPS 1-4 4.37 Others 68.15	73.22	Up to FY 2014-15
		Ind AS Spares	31.84	FY 2015-16
3	31.10.2018	**Ind AS Spares**	25.70	FY 2016-17
4	31.10.2019	**Ind AS Spares**	10.54	FY 2017-18
		Total	**440.8**	

The opening GFA as on 01.04.2019 is as per FAR and exclusive of the impact of Ind AS capitalization amounting to Rs. 281.20 cr. (440.80-154.53-0.7-4.37) & Fixed Assets relating to PTPS 1 to 4 and FTPS. The total disallowances of the capitalization amounting to Rs. 440.80 cr. an amount of Rs. 154.53 crore pertains to the GAAP spares and rest of Rs. 286.27 crore to the Ind AS capitalization impact. From the disallowed GAAP spares capitalization of Rs. 154.53 crore, an amount of Rs. 8.29 cr. pertains to PTPS 1 to 4 capitalization of which has not been taken into consideration in the GFA. As such the net disallowable capitalization on this account remains Rs. 146.24 crore (154.53-8.29).

GFA as on 01.04.2019 after excluding the disallowances made by the Hon'ble Commission on account of GAAP spares & exclusive of PTPS 1 to 4, is given in the below table. Net Allowable GFA as on 01.04.2020 and 31.03.2021 after considering the disallowances and additions during the year is given as under: -

Allowable GFA for FY 2020-21

Unit	GFA as on 01.04.2019-exclusive of Ind AS	Disallowances – GAAP spares	Allowable GFA as on 01.04.2019	Addition during 2019-20	Allowable GFA as on 01.04.2020	Addition during 2020-21	Allowable GFA as on 01.04.2021
PTPS – 5	291.15	34.47	256.68				
PTPS – 6	996.71	1.07	995.64	0.50	996.14	31.00	1027.14
PTPS – 7	945.09	2.35	942.74	-	942.74	36.90	979.64
PTPS -8	954.59	5.53	949.06	-	949.06	37.45	986.51
DCRTP-1	1,132.84	13.65	1119.19	12.55	1131.74	2.00	1133.74
DCRTP-2	1,132.41	13.65	1118.76	10.25	1129.01	2.00	1131.01
RGTPP-1	2,171.87	37.76	2134.11	1.43	2135.54	14.73	2150.27
RGTPP-2	2,172.03	37.76	2134.27	1.43	2135.7	5.69	2141.39
Hydel	199.87	-	199.87	10.25	210.12	4.50	214.62
Total	9996.56	146.24	9850.32	36.40	9630.05	134.27	9764.32

10.3 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. HPGCL has further pre-paid SBI loans amounting to Rs. 419.28 Crore which were at a higher rate of interest of 9.05% p.a.to reduce the Interest and Finance Charges.

It has been submitted that HPGCL is expecting to incur interest and finance charges amounting to Rs 86.81 Cr. in FY 2020-21 while the pre-restructuring interest and finance charges for FY 2020-21 are Rs 211.29 Cr. Therefore, there will be expected saving of Rs 124.48 Cr (Rs 211.29- 83.81 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 2020-21.

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 2012. 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 2020-21

FY2020-21	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	3.03	3.04	0.00	0.00	3.04	-	3.04
PTPS 7	3.34	3.34	0.00	0.00	3.34	0.01	3.35
PTPS 8	3.37	3.38	0.00	0.00	3.37	0.01	3.38
DCRTPP-1	1.52	29.79	28.27	14.14	15.66	-	15.66
DCRTPP-2	1.34	29.61	28.27	14.14	15.47	-	15.47
RGTPP-1	36.57	70.53	33.97	16.98	53.55	0.11	53.66
RGTPP-2	35.84	69.81	33.97	16.98	52.82	0.11	52.93
WYC Hydel	1.23	1.23	-	-	1.23	-	1.23
Total	**86.24**	**210.72**	**124.48**	**62.24**	**148.48**	**0.23**	**148.71**

10.4 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.

Further, it has been submitted that HPGCL has made equity addition amounting to Rs. 15.63 Crore in FY 2018-19 and an amount of Rs. 5.43 Crore of this equity contribution has been considered as normative debt @ 8.50% as per regulation 19.2 (b) of HERC MYT Regulation 2012. Accordingly, only Rs. 10.20 Crore (15.63-5.43) has been considered as part of equity for the purpose of tariff determination of FY 2020-21.

Accordingly, the equity employed exclusive of PTSP Unit-5 and RoE for FY 2020-21 is as under: -

Details of Equity Deployed in FY 2020-21 (Rs Cr.)

Sr. No.	Unit#	Closing FY 2018-19	Additions FY 2019-20	Additions FY 2020-21	Closing FY 2020-21	Proposed RoE@ 14%
1	PTPS – 6	156.77	0.10	6.20	163.19	22.40
2	PTPS – 7	218.04	-	7.38	225.54	31.04
3	PTPS – 8	218.02	-	7.49	225.63	31.05
4	DCRTPS-1	247.63	2.51	0.40	250.78	35.05
5	DCRTPS-2	247.58	2.05	0.40	250.27	34.98
6	RGTPS-1	491.80	0.29	3.07	495.43	69.10
7	RGTPS-2	491.24	0.29	1.26	493.06	68.89
8	Hydel	15.27	1.05	1.70	18.02	2.49
	Total	2,086.36	6.28	27.90	2,121.92	295

10.5 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 8.55% p.a. Accordingly, HPGCL has estimated the working capital requirements and the interest on working capital @ 10.05% (8.55%+1.50%).

As per the Model Fuel Supply Agreement applicable all over India, generating companies have to pay a cyclic advance payment to the coal companies in every 10 days and therefore, on an average working capital for 15 days advance in a month is to be maintained with the coal companies. The CERC Regulation 2019 have also considered one month for the advance payments of the coal. However, the Hon'ble Commission in its HERC MYT Regulation, 2019 has overlooked this requirement. HPGCL has also highlighted this issue it its memo no. 1843/HPGCL/FIN/REG-478 dated 13.11.2019 submitted to the Hon'ble Commission.

HPGCL has considered working capital requirement of 45 days of coal stock and the 45 days of receivables which is more representative of the actual working capital requirement of HPGCL. Hon'ble Commission is empowered to relax under Regulation 79 of the HERC MYT Regulation, 2019, according to which

> *"The Commission may in public interest and for reasons to be recorded in writing, relax any of the provision of these Regulations."*

Accordingly, HPGCL has submitted Interest on working capital for the FY 2020-21 is as under: -

IWC (Normative) for FY 2020-21 (Rs Cr.)

Unit #	Coal Stock	Oil Stock	O&M Expenses	Maint. Spares	Receivables	Total W/C Requirement	Int. on W/C
	1.5 Months	1 Month	1 Month	10 %	1.5 Months		10.05%
PTPS - 6	66.68	0.67	10.22	12.26	89.14	178.97	18.00
PTPS - 7	77.98	0.40	10.64	12.77	105.07	206.86	20.78
PTPS - 8	77.98	0.40	10.64	12.77	105.21	207.00	20.80
DCRTPP-1	92.35	0.49	11.51	13.81	123.09	241.25	24.25
DCRTPP-2	92.35	0.49	11.51	13.81	123.10	241.27	24.25
RGTPP-1	193.25	0.95	14.64	17.57	250.77	477.19	47.96
RGTPP-2	193.25	0.95	14.64	17.57	250.61	477.03	47.94
Hydel			3.52	3.17	6.91	13.61	1.38
Total	793.85	4.36	87.32	103.73	1,053.91	2,043.17	205.36

10.6 Cost of Oil

HPGCL submitted that the normative gross Generation from the thermal projects of HPGCL, normative oil consumption, rate of oil and the total Cost of Oil for FY 2020-21 is given as under: -

Cost of Oil in FY 2020-21 (Rs. In Cr.)

S. N	Unit#	Gross Gen. (MU)	Sp. Oil Cons. (ml/Kwh)	Total oil cons. (Kl)	Rate of oil (Rs. per Kl)	Total Cost of Oil
1	PTPS - 6	1564	1	1564	51515	8.06
2	PTPS - 7	1862	0.5	931	51515	4.79
3	PTPS - 8	1862	0.5	931	51515	4.79
4	DCRTPP-1	2234	0.5	1117	52736	5.89
5	DCRTPP-2	2234	0.5	1117	52736	5.89
6	RGTPP-1	4468	0.5	2234	51156	11.43
7	RGTPP-2	4468	0.5	2234	51156	11.43
	Total	18692		10128		52.28

10.7 Total Fixed Cost

HPGCL proposed Fixed Cost of HPGCL Plants proposed for FY 2020-21 is as under:-

Annual Fixed Cost (Rs. Cr.) for FY 2020-21

S.N	Unit #	O&M	Depreciation	Interest & Finance Charges	Return on Equity	W/C Interest	Oil	Total Fixed Cost
1	PTPS - 6	122.59	6.69	3.04	22.40	18.00	8.06	180.78
2	PTPS - 7	127.68	28.67	3.35	31.04	20.78	4.79	216.31
3	PTPS - 8	127.68	29.78	3.38	31.05	20.80	4.79	217.48
4	DCRTPP-1	138.10	26.96	15.66	35.05	24.25	5.89	245.91
5	DCRTPP-2	138.10	27.32	15.47	34.98	24.25	5.89	246.01
6	RGTPP-1	175.71	102.24	53.66	69.10	47.96	11.43	460.1
7	RGTPP-2	175.71	101.91	52.93	68.89	47.94	11.43	458.81
8	Hydel	42.30	9.28	1.23	2.49	1.38	0	56.68
	Total	1047.87	332.85	148.72	295	205.36	52.28	2082.08

10.8 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.

10.9 HPGCL has further requested to allow Plant wise recovery of Fixed Cost as already submitted by HPGCL dated 13/11/2019 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.

10.10 Summary of Tariff computation for the FY 2020-21

Based on above submissions the proposed tariff i.e. Total Capacity Charges and Energy Charge Rate (ECR) per kWh for FY 2020-21 is summarized as under:

Tariff Summary for FY 2020-21

Particular	PTPS 6	PTPS 7	PTPS 8	DCRTS 1	DCRTS 2	RGTPS 1	RGTPS 2	WYC HEP	Total
Total Capacity Charges (Rs crore)	180.78	216.31	217.48	245.91	246.01	460.10	458.81	56.68	2082.08
Energy Charge Rate (Rs/kWh)	3.790	3.663	3.663	3.615	3.615	3.681	3.681		3.671

10.11 HPGCL's has Prayed as under: -

a) Admit this Petition.

b) Consider the operational constraints and other concerns of the HPGCL as submitted in this petition and pass appropriate order for remedial measures.

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 consider the PoC Charges, losses and other cost included in the landed cost of power supplied while considering and approving PPAs for getting power supply from the sources outside Haryana as submitted in this petition.

e) Approve revised schedule of capital expenditure plan for FY 2019-20 to FY 2022-23 as submitted in this Petition.

f) Approve True-up of FY 2018-19 at Rs 651.34 Cr. after considering the Non-Tariff Income as proposed as per audited financial statements as detailed in this petition with appropriate holding cost.

g) Consider and allow the incentive on the savings as submitted in the true up. Consider and allow recovery of energy charges credited to Discoms for the months when the units were boxed-up on the instructions of the beneficiaries in FY 2018-19 as submitted in the true up.

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 in FY 2020-21 as approved by Hon'ble Commission in previous years of HPGCL Generation Tariff considering the vintage of the plant. Also consider additional Aux. Cons. for PTPS on account of Tube type coal mills as provided in CERC Regulation.

j) Consider and approve the oil cost as a part of the fixed cost as per the formula given in the Regulation 31 (c) (ii).

k) To consider the correction of apparent error in fixing the O&M norms and reasonable amendment in the HERC MYT Regulation, 2019 as submitted by HPGCL vide it memo dt. 13.11.2019 referred in the detailed submissions and Determine and approves the Generation Tariff for 2020-21 as proposed.

l) Consider relaxed norms under Regulation 79 for the coal stock and receivable as per the justifications given in this petition.

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

n) 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.

o) Provide appropriate provision for considering the relaxation or relief granted by any appellate authority on the appeals of the petitioner.

p) 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.

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

11 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, 2004, the Commission scheduled a hearing on 10.02.2020 in order to afford an opportunity to the stakeholders to present their objections / suggestions on the present petition of HPGCL. In response to the public notice no comments / objections were filed by any stakeholder including the DISCOMs. However, the representatives of UHBVNL / HPPC (DISCOM) present in the hearing, raised certain oral objections on the petition filed by HPGCL. As entire power generated by HPGCL is purchased by the Haryana DISCOMs, the Commission despite the fact that no written objections were filed by UHBVN, considered it appropriate to hear UHVBN at length. Upon hearing the petitioner (HPGCL) and the intervener i.e. UHBVNL, the Commission as prayed for allowed UHBVNL to file written comments within 3 days. HPPC, vide its Memo No. Ch-22/CE/HPPC/SE/C&R-I/PPA-140/9E/HPGCL dated 18.02.2020, filed their comments on the petition filed by HPGCL under consideration of the Commission. Briefly stated HPPC has submitted that backing down of HPGCL's power plant is not unfair as claimed by the Petitioner but it is in accordance with the principles of merit order schedule and dispatch based on ranking of all approved sources of supply in order of their variable cost of power. In support of the principles adopted HPPC cited regulations 59.1 to 59.4 of the HERC MYT Regulations, 2019. In response to the claims of the Petitioner that about 70% of consumption of power is procured by HPPC from sources other than HPGCL mostly from pithead stations where the cost of transportation is negligible; HPPC has submitted that due to growing down the available capacity of HPGCL power plant i.e. 2792 MW was not sufficient as the maximum demand has already crossed 11000 MW. Hence, there was no option except to tie up power from CGS, IPPs and through Case I and Case II competitive bidding etc. with approval of the Commission from time to time. On the issue of merit order scheduling and inclusion of Secondary Oil Cost in variable charges pushing HPGCL's power plant further down the merit order, HPPC has submitted that HPGCL is claiming Oil Cost amounting to Rs. 52.28 Crore in the FY 2020-21 as part of Annual Fixed Cost is not correct and also not inline with CERC / HERC MYT Regulations is not correct and needs to be corrected. CGS and other inter-State Generators are governed by CERC Regulations wherein the cost of Oil is included in the variable charges, hence, such dispensation, will impact the merit order stack w.r.t. HPGCL does not hold good. 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 and justification and also not in line with POSOCO dispensation on the issue as Transmission Charges are of Fixed 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 and 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. Regarding Capex / Revised Capex of HPGCL the intervener has submitted that the same should be kept within the work wise Capex approved by the Commission. Additionally, it has been submitted that the proposed Capex on FGD for its various power plants is on the higher side as compared to the cost estimation done by the Central Electricity Authority (CEA) and no shutdown may be allowed for the purpose. It has been submitted that SCR / SNCR is not envisaged at this stage. HPPC has submitted that no relaxation in Auxiliary Consumption for PTPS – 6 sought by HPGCL may be allowed and the same should be pegged at 9% as per the provisions of the MYT Regulations, 2019. Further, keeping in view the performance of HPGCL and inline with the previous Order(s) of the Commission RoE should be pegged at 10% as against 14% proposed by the Petitioner herein. Similarly, Interest on working may be estimated and allowed as per HERC MYT Regulations and not as proposed by the HPGCL i.e. 45 days of coal stock etc.

The intervener has suggested that HPGCL should procure secondary fuel oil from the same source as being done for RGTPS given the most economical cost and GCV. Objecting extensively on the O&M expenses the intervener has submitted that the same is significantly higher as compared to that allowed by the Commission in the FY 2019-20 and also as compared to the CERC norms. Hence, there is a need to re-look at the HERC norms notified vide 1st Amendment of the MYT Regulations, 2019. It has been further submitted that O&M expenses cannot be allowed for the closed Unit – 5 of HPGCL. The unjustified / substantiated cost including cost of employees, payment to Alstom and to the service tax department ought not to be allowed as the same has not actually be paid. Both these amounts can be considered in the True-up. HPPC has also commented on Technical Minimum Schedule and requested to implement the same i.e. 55% for power plants other than PTPS. It has also been submitted by the Intervener that the recovery of FC for PTPS Unit – 5 should be proportionately restricted up to the months of October, 2019 and the balance as part of True-up for the FY 2019-20. Recovery of FC of WYC ought to be restricted up to the FC determined by the Commission excess may be refunded to HPPC. Additionally, the GCV of coal may be considered at the receiving end with appropriate adjustment in line with the CERC Regulations, 2019 as against the HERC MYT, 2019 provision of considering GCV at fired end for computing variable charges. It has been submitted that the assets of de-commissioned Unit – 5 may be expeditiously disposed of and the proceeds utilized for repayment of term-loan so as to bring down the interest cost of HPGCL. Hence, HPGCL may be directed to submit the schedule of disposal of assets, transfer or disposal of spares and other non-depreciated assets to other power plants of HPGC. The intervener has submitted that there is no justification in the claim of HPGCL for incentive of Rs. 62.24 Crore under Interest and Finance Charges for the FY 2020-21 as the electricity consumer ought not be burdened with repeated incentive.

The Commission has taken note of the above submissions which was filed at a belated date and much after the cut-off date for filing objections / suggestions notified by the Commission. It is made clear upfront that the proceedings for determination of Generation tariff cannot traverse beyond the MYT Regulations and the norms as per the MYT Regulations is not open to question in this proceeding. As the objections have been filed at a late stage and after the public hearing in the matter the Petitioner had no opportunity to file a rejoinder / rebuttal. Nonetheless, while passing the present order, wherever, objections seems to have some merit prima – facie the same has been kept in mind by the Commission.

The petitioner was further directed to provide the following documents/information: -

i) Unit-wise breakup of O&M expenses for the FY 2017-18 & proposed for FY 2020-21 into Employee cost, Repair & Maintenance and Administrative & General Expenses.

ii) HPGCL has reported that deemed PLF for DCRTPP-1 and RGTPP-1 for FY 2018-19 was 69.51% and 83.48%, respectively against the approved norms of 85%. Accordingly, HPGCL may confirm whether fixed cost was recovered to the extent of 69.51% and 83.48%, in line with the MYT Regulations in vogue.

iii) Forced outages, as against planned outages (scheduled annual maintenance), of DCRTPS unit 1 has increased to 1825 hours in FY 2018-19, as compared to 572 hours in FY 2017-18. Similarly, for RGTPP-1, it has increased to 1301 hours in FY 2018-19 as compared to 428 hours in FY 2017-18. Further, PLF of RGTPP, Hisar has remained very low in the FY 2019-20 (up to Sept., 2019). HPGCL may explain the reasons for the same.

iv) HPGCL may explain the rationale for FGD installation in PTPS-6 at cost of Rs. 31.00 Crore, which has already completed 19 years of lifespan, and has not been scheduled in the FY 2019-20 till date.

v) Interest on term loan for pre-restructuring period for the FY 2018-19 approved in the Order dated 31.10.2018, is Rs. 240.40 Crore. It has now in the present petition stated as 279.00 Crore and sought the benefit of saving in interest cost from the level of Rs. 279 crore, instead of Rs. 240.40 Crore. HPGCL may explain how the interest on term loan for pre-restructuring period has changed from 240.40 crore to Rs. 279 Crore for the FY 2018-19.

vi) Rs. 144.19 Crore paid to M/s. Alstom Power in respect of closed unit no. 2 of PTPS, has been claimed by HPGCL as O&M Expenses.

The Commission in its Order dated 31.03.2016, had not approved unclaimed depreciation in respect of closed units of PTPS (1 to 4) and decided as under: -

> *"Hence, all the plants, machinery and equipment of PTPS (units 1-4) are in running condition. Resultantly, the residual values of these Units are expected to be more than the normative salvage value of 10%. Thus, HPGCL may get valuation of the same done at the earliest along with valuation of the land of PTPS (units 1-4) and submit a report to the Commission so that a view may be*

taken regarding the adjustments of the balance depreciation amount and un-paid loans, if any."

In view of the above, HPGCL may justify their claim of booking Capital expenditure under O&M expenses and claiming expenditure of closed unit from running units.

vii) Abnormal increase in terminal liabilities.

The employee cost of HPGCL for the FY 2017-18 as per audited accounts was Rs. 745.94 Crore (including terminal liabilities -Rs. 485 Cr.), regarding HPGCL had explained that it was after giving effect to 7th pay commission, allowance of gratuity benefit to employees joined after 01.01.2006 and increase in gratuity limit from Rs. 10 lacs to Rs. 20 lacs etc. Now, the same has increased in the FY 2018-19 to Rs. 993.38 Crore (including terminal liabilities – Rs. 688.45 Crore) i.e. an increase of 33.17%.

In this regard, HPGCL has submitted the Report of the Valuer, who had valued Terminal Liabilities for the FY 2017-18 & 2018-19, in support of abnormal increase in terminal liabilities in the FY 2018-19. HPGCL must have analyzed the reason for such abnormal increase. The same may be explained. As also pointed out by the intervener that the DISCOMs & HVPNL has comparatively larger number of employees, yet the terminal liability is on the lower side. HPGCL may also inform whether the Actuary appointed for the purpose is same for all the Haryana Power Utilities or different.

viii) HPGCL has submitted that the coal quality claims were received from coal companies in FY 2018-19 (Rs. 94.37 Crore) and FY 2019-20 till date (Rs. 30.85 Crore). HPGCL may intimate, whether the same were passed on to DISCOMs.

ix) The Commission, subsequent to the Public Hearing held on HPGCL's ARR / Tariff Petition, passed an Interim Order dated 11.02.2020. In compliance of the said Order, HPGCL, vide Memo No. 1893/HPGCL/FIN/REG-495 dated 28.02.2020 submitted as under: -

x) **Commission's Query:** Unit-wise breakup of O&M expenses for the FY 2017-18 & proposed for FY 2020-21 into Employee Cost, Repair & Maintenance and Administrative & General Expenses.

HPGCL Reply: The requisite information is enclosed as Annexure-A.

The Commission has taken note of the information provided and shall take the same into consideration while apportioning the composite O&M expenses into various components.

(i) **Commission's Query:** HPGCL has reported that deemed PLF for DCRTPP-1 and RGTPP-1 for FY 2018-19 was 69.51% and 83.48%, respectively against the approved norms of 85%. Accordingly, HPGCL may confirm whether fixed cost was recovered to the extent of 69.51% and 83.48%, in line with the MYT Regulations in vogue.

HPGCL Reply: It is confirmed that, HPGCL has recovered the fixed cost corresponding to the deemed PLF of 69.51% and 83.48% only, in respect of DCRTPP-1& RGTPP-1, in line with the HERC MYT Regulations in vogue.

The Commission has taken note of the aforesaid reply and observes that recovery of Fixed Cost as determined by the Commission has to necessary be in accordance with the MYT Regulations and, excess recovery, if any shall attract Section 62 (6) of the Electricity Act, 2003. Further, fixed cost recovery of PTPS – Unit 5 shall be proportionately restricted up to the month of Oct., 2019.

(ii) **Commission's Query:** Forced outages, as against planned outages (scheduled annual maintenance), of DCRTPS unit 1 has increased to 1825 hours in FY 2018-19, as compared to 572 hours in FY 2017-18. Similarly, for RGTPP-1, it has increased to 1301 hours in FY 2018-19 as compared to 428 hours in FY 2017-18.

Further, PLF of RGTPP, Hisar has remained very low in the FY 2019-20 (up to Sept., 2019). HPGCL may explain the reasons for the same.

HPGCL Reply: The reasons for the forced outages of DCRTPP-1 and RGTPP-1 are as under:

A. **DCRTPP-1**: 1718 hrs to attend the unprecedented problem of high exhaust pressure & temperature of HP Turbine.

B. **RGTPP-1**:

- Repair of Bottom Ash hopper& damaged refractory :(840 Hrs)
- Maintenance of Coal Compartment assemblies. (132 Hrs)
- Failure of BCP (160 Hrs)
- Turbine Throttle valve Problem (83 Hrs)

From the above it reveals that all the above problems are of unforeseen in nature and has occurred unprecedently due to intermittent running of the generating plants. Needless to mention here that the HPGCL generating plants has been considered as water taps and are getting erratic schedule and backing down which impacts the plant metallurgy and results in to the degradation in equipments which leads to the unexpected outages in the matter.

RGTPP units were available as per the regulations, however the scheduling of the Units is the sole prerogative of the Discoms. Inappropriate MoD stack preparation or demand supply factor of the Discoms may affect their scheduling of the generating station decision. It is also apprehended that the either the plants are not scheduled due to the low demand against the projections or Discoms may have other contractual obligations which impact the scheduling of the RGTPP Units.

The Commission has taken note of the above submissions and advises HPGCL to undertake preventive as well as predictive maintenance so as to minimise forced outages leading to under-recovery of Fixed Cost as well as loss of generation.

(iii) **Commission's Query:** HPGCL may explain the rationale for FGD installation in PTPS-6 at cost of Rs. 31.00 Crore, which has already completed 19 years of lifespan, and has not been scheduled in the FY 2019-20 till date.

HPGCL Reply: The PTPS-6 is still having the residual balance life of 6 years as per the prescribed useful life of the project in the HERC MYT Regulation. Attention is also invited towards the actual running of the plants in the past three four years due to its massive backing down on the instruction of the beneficiaries. Actual Residual life of the plant increases due to less utilization of the plant in its useful life. In the past, CERC has considered the extension in life in such cases such as in case of Gas Based stations the useful life has increased from 15 years to 25 years and in NTPC Singrauli etc. HERC has also recognizes the same in case of Faridabad gas plant.

Further, the installation of Flue Gas De-suplherizer (FGD) is the mandatory requirement as per the directive of the GoI to meet the stringent Environment Norms and fall under the change in law category. As such installation of FGD in PTPS-6 is not optional in the hand of HPGCL. The same has been identified by CERC in various matters.

It is also worth mentioning to submit here that HPGCL generating stations are the base load plant and designed to cater the base demand of the State. HPPC have more vintage plants in their kitty i.e. Singrauli (1987), Rihand-I (1989),Farraka (1994), Kahalgaon-I (1996), Unchahr I-II (1988-1989) than the PTPS-6 (2001) which have already outlived the life span of 25 years but are still on the bar and if the same is to be retained and the FGD is allowed for that projects, then the same case is implied to PTPS-6 also.

The reference further invited to CERC (Ancillary Services Operations) Regulations, 2015, Maharashtra MOD Guidelines wherein it has been clearly stipulated that the State Discoms should have the reserve equal to the largest contracted quantum unit as reserve shut down for managing the contingencies. In case the Unit 6 be retained in the matter the incremental cost to be borne by the Discoms is Rs 25 Crore p.a. including FGD cost (R&M/ A&G around Rs 20 Crore and FGD Cost of Rs 5 Crore), as the employee cost in any case has to be borne by the Discoms as done in past for Unit I to IV. The FGS cost of Rs. 31 crore will not be a onetime burden rather it will be recovered in the residuary life of the plant which is at least 6 years as per Regulation also. Thus, only at an incremental cost of Rs 25 Crore p.a. without any extra financial implications like PoC or other issues, a reserve capacity to meet the contingencies in the best interest of the Consumers of the State can be kept. Hence, to retain the PTPS-6 is the best in the interest of the state consumers and the meager amount on FGD should be allowed in the matter.

It is also not out of place to mention here that Scheduling of the Units is the sole preview of the Discoms, there may be the fare chances that the low demand may be the reason for not scheduling the Unit-6 or it is apprehended that the Discoms under their contractual obligations from other sources may impact the scheduling of Unit-6. If the past trends be seen, in last three years the scheduling is affected on account of no demand from Discoms only and whenever the unit is operated it is capable to run at its full capacity. However, HPGCL Unit -6 remains available as per the norms of regulations.

The Commission has taken note of the above submissions.

(iv) **Commission's Query:** Interest on term loan for pre-restructuring period for the FY 2018-19 approved in the Order dated 31.10.2018, is Rs. 240.40 Crore. It has now in the present petition stated as Rs. 279.00 Crore and sought the benefit of saving in interest cost from the level of Rs. 279 crore, instead of Rs. 240.40 Crore. HPGCL may explain how the interest on term-loan for pre-restructuring period has changed from Rs. 240.40 crore to Rs. 279 Crore for the FY 2018-19.

HPGCL Reply: It is submitted that pre-restructuring interest on term loan amounting to Rs. 240.40 crore as observed by Hon'ble HERC was projected by the HPGCL inadvertently in its tariff petition for the FY 2018-19 after considering the impact of the advance repayments as on the date of filing. However, the advance repayments were made beyond the original approved repayment schedule of the loan portfolio by observing the financial prudence to minimize the interest cost.

As such now in the true up petition for FY 2018-19 filed in Nov. 2019, the pre restructuring interest on term loan has been correctly submitted as per the original loan portfolio approved by the Hon'ble HERC. The details of the original loan portfolio and the actual loan portfolio already stand submitted in the petition at table No. 17 & 18 at page No. 31.

The Commission has taken note of the above submissions.

(v) **Commission's Query:** Rs. 144.19 Crore, paid to M/s. Alstom Power in respect of closed unit no. 2 of PTPS, has been claimed by HPGCL as O&M Expenses.

The Commission in its Order dated 31.03.2016, had not approved unclaimed depreciation in respect of closed units of PTPS (1 to 4) and decided as under:-

"Hence, all the plants, machinery and equipment of PTPS (units 1-4) are in running condition. Resultantly, the residual values of these Units are expected to be more than the normative salvage value of 10%. Thus, HPGCL may get valuation of the same done at the earliest along with valuation of the land of PTPS (units 1-4) and submit a report to the Commission so that a view may be taken regarding the adjustments of the balance depreciation amount and un-paid loans, if any."

In view of the above, HPGCL may justify their claim of booking Capital expenditure under O&M expenses and claiming expenditure of closed unit from running units.

HPGCL Reply: The amount of Rs. 144.19 crore does not pertain to the Depreciation. In fact it is the amount provided for in compliance to the Arbitration award. As such the award has been pronounced now as such the same has been claimed in line with the Regulation 18.2.2(c).

The Commission has taken note of the above submissions and observes that the reference was in the context of allowing expenses of a generating unit not in service of the ultimate consumers and hence cannot be considered / loaded on to other generation units in service. Such cost, if the same has attained finality should ideally be recovered from the salvage value of the de-commissioned generating unit.

(vi) Commission's Query: Abnormal increase in terminal liabilities.

The employee cost of HPGCL for the FY 2017-18 as per audited accounts was Rs.745.94 Crore (including terminal liabilities -Rs. 485 Cr.), regarding which HPGCL had explained that it was after giving effect to 7th pay commission, allowance of gratuity benefit to employees joined after 01.01.2006 and increase in gratuity limit from Rs. 10 lacs to Rs. 20 lacs etc. Now, the same has increased in the FY 2018-19 to Rs. 993.38 Crore (including terminal liabilities – Rs. 688.45 Crore) i.e. an increase of 33.17%.

In this regard, HPGCL has submitted the Report of the Valuer, who had valued Terminal Liabilities for the FY 2017-18 & 2018-19, in support of abnormal increase in terminal liabilities in the FY 2018-19. HPGCL must have analyzed the reason for such abnormal increase. The same may be explained. As also pointed out by the intervener that the DISCOMs & HVPNL has comparatively larger number of employees, yet the terminal liability is on the lower side. HPGCL may also inform whether the Actuary appointed for the purpose is same for all the Haryana Power Utilities or different.

HPGCL Reply: As per Annexure- B attached.

The Commission has considered the aforesaid reply on the issue of actuarial valuation of the terminal benefits which was also deliberated in the SAC Meeting. The Commission is not convinced as the spike in valuation defies logical reasoning. Hence, before considering the proposed amount, the Commission directs HPGCL to get the valuation examined by an expert third party agency in concurrence with DISCOMs, with proper mapping of all the issues / assumptions considered by the present Actuary and the expert agency appointed for the purpose and submit the report to the Commission.

(vii) **Commission's Query**: HPGCL has submitted that the coal quality claims were received from coal companies in FY 2018-19 (Rs. 94.37 Crore) and FY 2019-20 till date (Rs. 30.85 Crore). HPGCL may intimate, whether the same were passed on to DISCOMs.

HPGCL Reply : Yes, HPGCL has passed the coal quality claims as received from coal companies to DISCOMS.

The Commission has taken note of the aforesaid submissions.

Additional Submissions:

a. It is submitted that HPGCL has not received any other written comments / observations on its tariff petition from Discoms or any other stake holder. It is therefore requested that in case any such representation has been made to the Hon'ble Commission from any stakeholder, HPGCL may be allowed to submit its fair representation thereon by way of rejoinder before considering the same.

b. During the public hearing on HPGCL petition on dated 10.02.2020, while discussing about the Merit order dispatch system being followed by the HPPC, it was also desired that HPGCL should submit a comparative position of the scheduling of power on the basis of landed cost and peak-off peak demand & supply sources of the State. Accordingly, certain information was sought from the HPPC vide letter dated 14.02.2020 (Copy placed at Annexure-C) with a copy to Hon'ble Commission. Though the said information is yet to be received from the Discoms, yet a source wise landed cost statement of the power including PoC charges per unit of Inter State Power approved by the Hon'ble HERC in its order dt. 7/03/2019, i.e. @ Rs 1.42/KWH has been prepared and attached at Annexure- D for kind consideration.

c. The rationale of the proposed MoD stack as discussed and submitted by the HPGCL during the public hearing is also enclosed herewith at Annexure-E for kind consideration of the Hon'ble HERC.

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: -

"ii. 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.

iii. 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 needs 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.

12 State Advisory Committee (SAC)

In order to take forward the consultation process and to have the benefits of the views / suggestions of the Members of the SAC, a meeting of the State Advisory Committee, constituted under Section 87 of the Act, was convened on 24.02.2020 to discuss the petition filed by the Haryana Power Utilities including HPGCL. The views of the SAC Members pertaining to HPGCL is as under: -

Shri R.N. Prashar, IAS (Retd.), former Chairman, HERC, expressed concern over the abnormal increase in the employees cost of HPGCL in spite of very less scheduling of State Generating Stations. He further shared his observation on the following variations in Gross Calorific Value of oil (kcal/KL) & average landed cost of oil (Rs/Kl) claimed by HPGCL in its Petition for determination of generation tariff of the FY 2020-21, although the quality of oil and source is the same: -

Particulars	PTPS	DCRTPS	RGTPS
Gross Calorific Value of oil (kcal/KL)	10460	10458	10586
Average landed cost of oil (Rs/kL)	51515	52736	51156

Shri Mohammed Shayin, IAS, MD, HPGCL explained that GCV of oil is taken on average basis. There are slight differences in the GCV of various Thermal Stations of HPGCL, arising due to averaging. HPGCL shall conduct a study of data of last 5 years and submit a report in this regard. Regarding abnormal increase in employee cost, it was submitted that there are neither any additions in the number of employees nor creation of new posts in HPGCL during the FY 2018-19. Employee cost constitutes of Salaries & Wages and Terminal benefits. He informed the SAC Members that as far as Employees Cost per.se. is concerned the increase is just about normal. However, there is significant increase in the provisioning of terminal benefits of the employees, which is done on the basis of report of the actuary. HPGCL has no control over the valuation of retirement benefits done by an outside agency i.e. actuary. However, HPGCL is ensuring that manpower is properly utilised and rationalised in all its generating stations. Further, HPGCL is exploring the possibility of running PTPS Unit no. 6 on fuel mix of coal with paddy straw (torrified pellets).

Commission's Analysis and Order

The Commission, while passing the Order 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 10.02.2020 as well as the views expressed by the SAC Members in the meeting held on 24.02.2020.

At the onset, the Commission reiterates that the present order, as per past practice, is confined to the true up of FY 2018-19 in accordance with the HERC MYT Regulations, 2012 as well as determination of generation tariff for the FY 2020-21 in accordance with the HERC MYT Regulations, 2019 except for a few relaxations in the norms that may be considered on merit. Hence, the issues pertaining to the FY 2019-20 shall be considered by the Commission while undertaking similar exercise in the FY 2021-22 in line with the HERC MYT Regulations, 2019.

13 FY 2018-19 True-Up

The Commission has considered the submissions of the petitioner regarding 'true up' of various expenses for the FY 2018-19. While considering the true-up petition of HPGCL for the FY 2018-19, the actual expenditure as per the audited accounts of the FY 2018-19 vis-à-vis the expenses approved by the Commission vide its Order dated 31.10.2018 for the FY 2018-19 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 2018-19. The basis, details and the amount to be trued up under each head are discussed in the paragraphs that follows.

14 Operation and Maintenance (O&M) Expenses

O&M expenses approved by the Commission for the FY 2018-19 comprises of expenses to be incurred on routine Repair and Maintenance of the generation assets in use as distinguished from Capital Expenditure, Administrative & General Expenses for servicing the said assets and Employees Cost including the terminal liabilities to be incurred on the running of the power plants. 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 2018-19, true-up petition of HPGCL submitted vide memo no. 1851/HPGC/FIN/Reg-495 dated 29.11.2019 and additional information submitted by HPGCL vide its letter no. 1874/HPGC/FIN/REG-495 dated 08.01.2020. It is observed that HPGCL has sought true-up amounting to 661.55 Crore on account of O&M expenses (Rs. 563.07 Crore on account of Employee Cost including terminal benefits, Rs. 99.01 Crore on account of Repairs & Maintenance (R&M) expenses and net of saving of A&G expenses Rs. 0.54 Crore).

The Commission, on perusal of the claims, observes that there is abnormal increase in terminal liability in the FY 2018-19. The employee cost of HPGCL for the FY 2017-18 as per audited accounts is Rs. 745.94 Crore (including terminal liabilities of Rs. 485 Cr.). Regarding the spike in the terminal liabilities HPGCL had explained that it is due implementation of the recommendations of 7th Pay Commission, allowance of gratuity benefit to the employees who joined after 01.01.2006 and increase in gratuity limit from Rs. 10 lacs to Rs. 20 lacs etc. Now, the same has increased in the FY 2018-19 to Rs. 993.38 Crore (including terminal liabilities of Rs. 688.45 Crore) i.e. an increase of 33.17%.

On ibid issue, the Commission sought further details from HPGCL, vide letter dated 23.12.2019, as well an Interim Order dated 11.02.2020. In reply, HPGCL cited the actuarial valuation report carried out by independent actuary firm M/s A. Balasubramanian (FY 2017-

18 - M/s. I Sambasiva Rao). It has been submitted that the terminal liability is an uncontrollable expenditure under Regulation 8.3(b) of the MYT Regulations. The actual employee cost including terminal liability as per the audited accounts for the FY 2018-19 is Rs. 993.38 Cr. as against the approved Employee cost of Rs. 430.31 Cr. Thus, there is an increase of Rs. 563.07 Crore in the actual Employee cost over the HERC approved amount.

A perusal of the report submitted by the Actuary for the FY 2018-19, reveals that the current cost of retirement benefits for the FY 2018-19 was Rs. 58.50 Crore (-) and loss due to experience variance and less return on retirement fund amounts to Rs. 746.96 Crore. Thus, net retirement benefits, to be charged to expense during the FY 2018-19 works out to Rs. 688.46 Crore (746.96 - 58.50). The corresponding figures for the FY 2017-18, was Rs. 179.78 Crore for current year and Rs. 305.23 Crore for changes in financial assumptions etc. (total Rs. 485.01 Crore).

The Commission observes that the incremental deficit worked out by the Actuary, raises some doubts regarding the underlying assumptions impacting the abnormal increase in Valuation. The Petitioner i.e. HPGCL was also not able to give any convincing reply regarding the assumptions / changes in the assumptions leading to wide variations in the amount assessed towards terminal liabilities. The interveners, in the public hearing, also brought to the notice of the Commission that the DISCOMs & HVPNL have comparatively larger number of employees yet the terminal liability is lower than that claimed by HPGCL based on Actuarial Valuation.

HPGCL was again directed to clarify the abnormal increase in terminal liabilities reported by HPGCL on the basis of report of the Actuary not only in the FY 2018-19 but in the FY 2016-17 also. HPGCL submitted that in the FY 2017-18, liabilities for medical benefits has not been taken into consideration. However, the same has been taken in the FY 2018-19 which is to the tune of Rs. 179.82 Crore. Further, the pension liabilities in respect of current pensioners were not valued by the previous actuary which has been considered in the present valuation for FY 2018-19.

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;

……..

(b) 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 shall be considered as uncontrollable, subject to the prudence check/validation and approval of the Commission. The Commission observes that HPGCL has also claimed employee cost in respect of closed units of Faridabad and Panipat (Units 1 to 4), without proper restructuring/ re-deployment of the manpower. The Commission, at this point of time, is not approving the employee cost of Rs. 993.38 Crore. Hence, the same is retained at the level approved for the FY 2017-18 i.e. Rs. 745.94 Crore. As previously recorded in the present Order, HPGCL shall in concurrence with DISCOMs, appoint a third-party expert agency to re-visit the entire issue of valuation and submit a report to the Commission. The difference amount of Rs. 247.44 Crore (Rs. 993.38 Crore minus Rs. 745.94 Crore) shall be considered on the availability of the report of the said expert agency as part of 'true-up' for the relevant year. The Commission further directs HPGCL to seek prior approval of the Commission for contribution to the retirement benefit trust in excess of that proposed by it in the ARR in future in view of the fact that there is no legal hitch in staggering the payment to the trust funds, in order to avoid tariff shock to the ultimate consumers of electricity.

The Commission observes that O&M expenses for the FY 2018-19 has increased from Rs. 245.70 Crore (approved) to Rs. 344.71 Crore (actual) i.e. an increase of Rs. 99.01 Crore, due to creation of provision of Rs. 164.98 Crore. The provision of Rs. 164.98 Crore comprises of anticipated liabilities of M/s. Alston power (now GE power – Rs. 144.19 Crore) and SCN issued by Service Tax Department in respect of Service tax on liquidated damages (Rs. 20.79 Cr.). Further, Other debits-written off (Rs. 29.20 Crore) forms part of O&M expenses, which includes write off of an amount recoverable from HVPNL (Rs. 23.39 Crore) and miscellaneous written off (Rs. 5.73 Crore) representing adjustment on account of valuation of closing stock: Rs. 6.06 Crore and has been shown net of certain credit amount.

The Commission observes that Rs. 144.19 Crore payment liability to M/s. Alstom Power in respect of closed unit no. 2 of PTPS, has been claimed by HPGCL as O&M Expenses.

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. 144.19 Crore paid to M/s. Alstom Power in respect of closed unit no. 2 of PTPS, is disallowed. **Any such liability arising out of Order(s) of the competent court / Tribunal etc. for the power station (s) not in operation / de-commissioned shall have to be necessary set-off against the salvage value as and when realized. Further, the amount of Rs. 23.39 Crore and Rs. 5.73 Crore, written off also cannot be allowed as part of O&M expenses. This is due to the fact that in the no such provision for 'writing off' exists in the HERC MYT Regulations for a generating company. Moreover, a government owned power generating company supplying power to a government owned Licensee ought not to have account receivable that may have to be written off from the balance sheet as contra- distinguishable from a Distribution Licensee selling power to electricity consumers wherein certain amount receivable may have to be written off after making sustained efforts to recover the same. Accordingly, the same i.e. Rs. 23.39 Crore and Rs. 5.73 Crore is also disallowed as the same cannot be passed on to the beneficiaries and ultimately to the end consumers of electricity.**

The A&G expenses approved by the Commission for FY 2018-19 was Rs. 21.41 cr. As against this, the actual A&G expense for the year remained at Rs. 20.87 cr. only. Accordingly**, the Commission trues-up the same at actual level i.e. 20.87 Crore**.

Thus, the actual allowable O&M expenses for the FY 2018-19 works out Rs. 938.22 Crore (Rs. 1358.97 Crore – {Rs. 247.44 Crore + Rs. 144.19 Crore + Rs. 23.39 Crore + Rs. 5.73 Crore}), as against the approved O&M expenses of Rs. 697.42 Crore. **Therefore, the balance O&M expenses amounting to Rs. 240.80 Crore (Rs. 697.42 Crore - Rs. 938.22**

Crore) is now considered for the purpose of true up.

15 True-up of Depreciation

The Commission has carefully examined the submissions of HPGCL that the actual depreciation in the FY 2018-19 was Rs. 385.96 Crores (net of solar business - Rs. 382.88 Crores) as against the approved depreciation of Rs. 367.59 crore. It has been further submitted that the depreciation on account of capitalization of spares and decommissioning cost is Rs. 12.70 Cr. and Rs. 5.92 Cr. respectively. Hence, the net allowable depreciation for FY 2018-19 exclusive of Solar business and depreciation on spares and Decommissioning Cost in accordance to the Ind AS is Rs. 364.26 Cr (382.88-5.92- 9.69- 3.01). Accordingly, HPGCL has claimed Rs 3.33 Cr. as true-up of depreciation for the FY 2018-19.

The Commission observed that in the memorandum account of fixed assets submitted by HPGCL, on the directions of the Commission in the Orders dated 31.10.2018 & 07.03.2019, depreciation on capitalization of spares, dismantling etc. (done otherwise than in accordance with HERC MYT Regulations), has not been claimed by HPGCL.

Therefore, the actual allowable depreciation for the FY 2018-19 works out to Rs. 364.26 Crore (i.e. Rs. 382.88 Crore minus Rs. 5.92 Crore minus Rs. 9.69 Crore minus Rs. 3.01 Crore), against the approved depreciation of Rs. 367.59 Crore. Therefore, the depreciation approved in excess amounting to Rs. 3.33 Crore (Rs. 367.59 Crore minus Rs. 364.26 Crore) is now trued up.

16 True-up for the Interest and Finance Charges

The Commission has examined the submissions of HPGCL that the actual interest and finance charges of HPGCL in the FY 2018-19 was Rs. 151 Crore (net of Solar Business –Rs. 147.98 Crore) as per the audited accounts for the year, as against the approved interest and finance charges on loan of Rs 211.01 Crore, after passing the 50% of the savings (Rs. 31.21 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 2018-19.

Interest and Finance charges for FY 2018-19 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	7.28%	54.26	0.00	6.78	47.47	3.70
SBI DCRTPP YNR (PFC)	12.50%	753.94	0.00	120.64	633.30	86.70
REC Hisar	12.25%	659.70	0.00	82.46	577.24	75.76
State Bank of India (RGTPP) PFC	11.45%	743.22	0.00	101.64	641.58	79.28
APDP Loan	12.50%	3.40	0.00	0.15	3.26	0.43
Punjab National Bank (Andhra Takeover)	8.65%	61.05	0.00	20.00	41.05	4.42
Punjab National Bank REC (Andhra Takeover Hisar)	8.65%	133.40	0.00	38.00	95.40	9.90
Punjab National Bank	12.25%	163.81	0.00	20.52	143.29	18.81
Total	11.73%	2572.78	0.00	390.19	2182.59	279.00

HPGCL has further submitted actual Interest and Finance charges for FY 2018-19 excluding solar business as under:

Particulars	Rate of Interest	Opening Bal	Additions during year	Repayments during year	Closing Balance	Interest during year
GPF Bonds	7.28%	54.26	-	6.78	47.47	3.70
PFC Loan (DCRTPP)	8.19%	391.99	-	120.66	271.35	27.15
REC (RGTPP)	9.08%	604.71	-	75.60	529.11	51.50
APDP Loan	12.50%	3.40	-	0.15	3.26	0.43
Andhra Bank (Misc. Capex)	8.65%	61.05	-	20.11	41.05	6.15
Andhra Bank (RGTPP)	8.65%	133.40	-	38.24	95.40	13.19
PFC Loan (RGTPP)	7.91%	213.14	-	74.22	138.92	13.92
PNB Loan	8.32%	163.81	-	20.52	143.29	12.78
PNB Loan	8.08%	324.28	-	44.80	279.48	24.40
Total	8.46%	1950.05	0.00	400.71	1549.34	147.98

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 60% of the savings. The Commission in its orders dated 31.10.2018 has allowed Rs. 211.01 Cr on account of interest & finance charges after passing on 50% of the net savings (amounting to Rs. 31.21 Cr) to the beneficiaries as submitted by HPGCL in the case of HERC/PRO-81 of 2017. 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	True-up
1	**2**	**3**	**4**	**5=3+50%(4-3)**	**6=5-2**
Int.& Fin. Charges (A)	211.01	147.98	279.00	213.49	2.47
Int. On Normative Debt(B)	0	0	0	0.23	0.23
Total True up of Int.& Fin. Charges(A+B)	**211.01**	**147.98**	**279.00**	**213.72**	**2.70**

HPGCL has therefore, requested to allow Rs 2.70 Cr. as pass through of Interest & Finance charges.

In this regard, the Commission observes that interest & finance charges amounting to Rs. 211.01 Crore as claimed by HPGCL, on the basis of restructuring, were allowed for the FY 2018-19, in the Order dated 31.10.2018. HPGCL in Petition no. HERC/PRO-81 of 2017, for determination of generation tariff for the FY 2018-19, had submitted that interest expenses pre-restructuring is Rs. 240.40 Crore and post-restructuring is Rs. 178.18 Crore. On the basis of submissions of HPGCL, the Commission had approved interest & finance charges, amounting to Rs. 211.01 Crore for the FY 2018-19.

HPGCL was asked to explain the reason for claiming the benefit of saving in interest cost from the level of Rs. 279 crore, instead of Rs. 240.40 Crore. In reply, HPGCL submitted that pre-restructuring interest on term loan amounting to Rs. 240.40 crore was projected by the HPGCL inadvertently in its tariff petition for the FY 2018-19 after considering the impact of the advance repayments as on the date of filing. However, the advance repayments were made beyond the original approved repayment schedule of the loan portfolio by observing the financial prudence to minimize the interest cost. As such in the true up petition for FY 2018-19 filed in Nov. 2019, the pre-restructuring interest on term loan has been correctly submitted as per the original loan portfolio approved by HERC. The details of the original loan portfolio and the actual loan portfolio already stand submitted in the petition.

The Commission observes that in the prevalent market scenario, there is general decline in the lending rate of PFC/REC. 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 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. Accordingly, pre-restructuring period interest has been calculated as under: -

Particulars	Rate of Interest	Opening Bal	Drawls during the year	Repayments during the year	Closing Balance	Interest during the year	Revised rate of interest by PFC/REC	Interest during the year with reduced rate of interest by PFC/REC
GPF Bonds	7.28%	54.26	-	6.78	47.47	3.70		3.70
SBI DCRTPP YNR (PFC)	12.50%	753.94	-	120.64	633.30	86.70	11.40%	79.07
REC Hisar	12.25%	659.70	-	82.46	577.24	75.76	10.90%	67.41
State Bank of India(RGTPP) PFC	11.45%	743.22	-	101.64	641.58	79.28	11.40%	78.93
APDP Loan	12.50%	3.40	-	0.15	3.26	0.42		0.42
Punjab National Bank (Andhra Takeover)	8.65%	61.05	-	20.00	41.05	4.42		4.42
Punjab National Bank REC (Andhra Takeover Hisar)	8.65%	133.40	-	38.00	95.40	9.90		9.90
Punjab National Bank	12.25%	163.81	-	20.52	143.29	18.82		18.82
Total	**11.73%**	**2,572.78**	-	**390.19**	**2,182.59**	**279.00**		**262.67**

In view of the above, considering the saving of interest subject to incentive and penalty framework as mentioned in the regulation 12.4, 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	True-up
1	**2**	**3**	**4**	**5=3+50%(4-3)**	**6=5-2**
Int.& Fin. Charges (A)	211.01	147.98	262.67	205.33	-5.68
Int. On Normative Debt(B)	0	0	0	0.23	0.23
Total True up of Int.& Fin. Charges(A+B)	**211.01**	**147.98**	**279.00**	**213.72**	**-5.45**

HPGCL is further directed that in all such subsequent calculations, while calculating interest during pre-restructuring period on the costly loans from PFC & REC swapped by it, the current interest rate on PFC and REC loans, may be taken, since 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.

17 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 2018-19. Further, Govt. of Haryana has contributed an amount of Rs. 15.63 cr. as equity contribution during the FY 2018-19. However, an amount of Rs. 5.43 crore of the equity contribution has been considered as normative debt @ 8.5% p.a. as per Regulation 19.2(b) of the HERC MYT Regulations 2012. Therefore, only Rs 10.20 Crore (15.63-5.43) has been considered as net equity addition for the purpose of true-up. Accordingly, the admissible RoE for the FY 2018-19, 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	217.90	0.14	218.04	21.80
PTPS – 8	217.88	0.14	218.02	21.80
DCRTPP-1	244.79	2.84	247.63	24.62
DCRTPP-2	244.74	2.84	247.58	24.62
RGTPP-1	489.69	2.11	491.80	49.07
RGTPP-2	489.12	2.11	491.24	49.02
Hydel	15.27	-	15.27	1.53
Total	**2,081.24**	**10.20**	**2,091.44**	**208.63**

Hence, HPGCL has prayed that excess RoE allowed for the FY 2018-19 amounting to Rs. 2.32 crore (Rs. 210.95 Crore minus Rs. 208.63 Crore) may be considered for truing – up.

The Commission has considered the submissions of HPGCL and allows the true-up of Rs. (-) 2.32 Crore as also proposed by the Petitioner.

18 True-up of interest on working capital

HPGCL submitted that the Commission in its Order dated 31.10.2018 regarding generation tariff for FY 2018-19 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 2018-19. Therefore, while computing the truing-up of working capital FY 2018-19, actual rate of coal and oil prevailing in FY 2018-19 has been considered.

Due to variation in the Fuel prices the normative working capital requirement for FY 2018-19, as per the approved norms of the HERC, has increased to Rs. 1985.61 Cr against the approved working capital requirement of Rs. 1883.05 cr. and consequently interest on working capital has also increased to Rs. 197.57 Cr against the approved interest on working capital of Rs. 187.37 Cr. Accordingly, HPGCL has sought true up of Rs. 10.20 Crore (Rs. 197.57 Crore minus Rs. 187.37 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. 101.89 Crore, as against the approved figure of Rs. 187.37 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. 8071.40 Crore to Rs. 5462.60 Crore. Further, the actual generation was also lower in the FY 2018-19 at 9983 MU as against the normative level of 18807 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 10^{th}-11^{th} 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. 74.90 Crore, during the FY 2018-19 which forms part of actual interest on working capital of HPGCL for the FY 2018-19 (Rs. 101.89 Crore). Excluding such rebate of Rs. 74.90 Crore, actual interest on working capital of HPGCL for the FY 2018-19 remains at Rs. 26.99 Crore (Rs. 101.89 Crore minus Rs. 74.90 Crore), as against the approved interest on working capital of Rs. 187.37 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. 74.90 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. 26.99 Crore only.

The Commission further observes that actual interest on working capital is Rs. 26.99 Crore only, as against the approved interest on working capital of Rs. 187.37 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. 26.99 Crore and allows the balance Rs. 160.38 Crore (Rs. 187.37 Crore – Rs. 26.99 Crore = 160.38 Crore) to be pass through to DISCOMs.

Further, the Commission has approved the Interest on Working Capital @ 9.95% (8.70%+1.25%). SBI Base Rate as on 01.04.2018 was 8.70%, as such there is no change in the allowable rate of interest on working capital, that may require truing-up.

19 Cost of Oil (Secondary Fuel Oil)

HPGCL has submitted that in the FY 2018-19, they had incurred expenses on Secondary Fuel Oil amounting to Rs. 33.57 Crore. The said amount was considerably lower than the HERC approved amount of Rs. 72.61 Crore i.e. Rs. 39.04 Crore. The prime reason for low oil consumption is better operational performance & lower generation of HPGCL's Power Plants.

That the Specific Fuel Oil Consumption in ml/kwh (SFC) had decreased from the approved weighted average HERC norm of 1.00 ml/kwh to 0.63 ml/kwh during the FY 2018-19 for all the HPGCL plants as a whole. HPGCL has further submitted that due to increase in oil rate, normative oil cost at actual oil rate stands at Rs. 102.56 Crore. Total saving in Oil cost has been bifurcated by HPGCL into saving due to SFC at actual rate (Rs. 19.86 Crore) and due to lower generation (Rs. 48.87 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. 30.08 Crore as an incentive and pass-through remaining the balance amount of Rs 8.96 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. Further, HPGCL is not allowed to claim any gains on normative generation due to increase in the oil price and claim higher oil cost. Thus, the savings on account of low SFC amounting to Rs. 19.86 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. 9.93 Crore (50% of Rs. 19.86 Crore) and the balance saving in Oil cost i.e. Rs. 29.11 Crore (Rs. 39.04 Crore minus Rs. 9.93 Crore), shall be passed on to the beneficiaries / Discoms.**

20 Auxiliary Energy Consumption

HPGCL has submitted that in the FY 2018-19, PTPS Units 5-6 & RGTPS Units 1-2 were boxed-up for many months continuously, where-in they had to operate their essential auxiliary for long stretch of time without getting any revenue in return. Additionally, the variable cost of units of auxiliary consumption for such months is being deducted from the monthly fixed cost of respective unit. The Commission in its earlier Order(s) has allowed refund of variable cost paid by HPGCL to the Discoms on account of auxiliary consumption for the months the units were boxed-up.

Accordingly, during 2018-19 also, HPGCL has incurred variable cost to the tune of Rs. 3.89 cr. during the boxing up of the units, as detailed below: -

Particular	PTPS-5	PTPS-6	RGTPP-1	RGTPP-2	Total
Aux Consumption when Boxed up (MUs)	3.29	1.14	3.90	1.93	10.26
Variable Cost (Rs per kwh)	3.40	3.40	3.44	3.44	
Variable Cost Refunded (Rs. Cr)	1.12	0.39	1.34	0.66	3.51

HPGCL has prayed to be allowed recovery of the energy charges amounting to Rs. 3.89 Cr. credited to the Discom during boxing up of the units.

The Commission has examined the submission of HPGCL and observes that due to frequent backing downs/shut-start operation due to low demand, it could attain PLF ranging from 9.61% (PTPS – 5) to 44.13% (RGTPP – 2) only. Undoubtedly, in order to keep these stations ready certain auxiliary motors had to be kept running thereby auxiliary energy consumption occurs even during the period that these stations remained boxed – up. However, no efforts seems to have been made by HPGCL, to make their units cost effective so that they can compete in the merit order. The Commission is allowing refund of variable cost as prayed for, on the basis of past practice, as last time relief. The Commission observes that HPGCL has prayed for refund of energy charges amounting to Rs. 3.89 Crore, **while the estimates provided in the table reproduced above adds up to Rs. 3.51 Crore. Accordingly, the Commission allows true-up of Rs. 3.51 Crore. 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.**

21 True-up of Non-tariff Income

The Commission observes that HPGCL has reported non-operating income (excluding prior period income due to adjustment in provisions of earlier years) of Rs. 32.93 Crore in the FY 2018-19, as detailed below: -

Particulars		FY 2018-19 (Rs. Crore)
Income from sale of scrap		6.19
Interest on fixed deposits		2.71
Delayed payment surcharge		12.53
Income from staff loans and advances		0.51
Others income other than refund of I. Tax and interest etc.	0.00	
Penalties recovered from contractors	3.99	
Rental from the contractors	1.05	10.99
Interest income from Mutual funds	5.30	
Others	0.65	
Total		**32.93**

A perusal of the table above reveals that an amount of Rs. 5.04 crore (3.99+1.05) included in the ‘other income’ pertains to the contractual obligation with the O&M contractors and suppliers of HPGCL and Rs. 5.30 crore is the interest income from deployment of surplus funds in the short-term securities to save the IWC. Savings are under incentive/ penalty mechanism under Regulation 12. The Commission is approving to retain 50% of the savings only with the HPGCL. As such HPGCL is proposing for true up of 50% of Rs. 5.04 Crore. HPGCL further submitted that it is providing subsidized loan to its employees. It had to incur interest and finance charges on the funding of the loan released to its employees. Such interest and finance charges are not being separately allowed by the Commission in the allowed interest & Finance cost of HPGCL. As such recovery of the interest on loan to the employees should not be reduced from the true up of HPGCL being legitimate cost of funding.

HPGCL has submitted that since the HERC MYT Regulations 2012 do not provide any specific regulations for non-tariff income/non-operating income for generation company, the same should not be deducted by the Commission for the purpose of true-up. Even if the Commission treats the non-operating income as income from other businesses, HPGCL should be allowed to retain 50% of the income and only 50% should be passed on to the beneficiaries. Accordingly, HPGCL has proposed true-up of Non-Tariff Income amounting to Rs. 12.01 Crore, as detailed below: -

Particulars		Amount (Rs. in crore)
Income from sale of scrap		6.19
Income from staff loans and advances		0
Others income (50%)		
Penalties recovered from contractors	2	
Rental from the contractors	0.52	5.82
Interest income from Mutual funds	2.65	
Others	0.65	
Total		**12.01**

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, Rs. 17.18 Crore has been reduced from the amount eligible for true up in the present Order.

<table>
<tr><th colspan="2">Particulars</th><th>FY 2018-19 Rs. crore</th></tr>
<tr><td colspan="2">Income from sale of scrap</td><td>6.19</td></tr>
<tr><td>Penalties recovered from contractors</td><td>3.99</td><td rowspan="4">10.99</td></tr>
<tr><td>Rental from the contractors</td><td>1.05</td></tr>
<tr><td>Interest income from Mutual funds</td><td>5.30</td></tr>
<tr><td>Others</td><td>0.65</td></tr>
<tr><td>Total</td><td></td><td>17.18</td></tr>
</table>

In view of the above discussions, the Commission allows true-up expenses for the FY 2018-19 as under: -

(Rs. Crore)

	HPGCL (Proposed)	HERC (Allowed)
O&M Expenses	661.55	240.80
Depreciation cost	(3.33)	(3.33)
Interest Cost	2.70	(5.45)
ROE	(2.32)	(2.32)
Interest on working capital	10.20	(160.38)
Oil Cost	(8.96)	(29.11)
Auxiliary Energy Consumption (due to backing down)	3.51	3.51
Non-Tariff Income	(12.01)	(17.18)
Total True-up	651.34	26.54
Add: Holding Cost @ 9.95% from 01.04.2019 to 31.03.2020 (12 months)		2.64
Total True-up including holding cost		29.18

HPGCL shall recover the aforesaid amount of Rs. 29.18 Crore from the Discoms i.e. UHBVNL and DHBVNL. The same shall become immediately payable upon the

submission of bill 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.

22 Capital Investment Plan (CIP)

The Capex approved by the Commission as well as the revised Capex filed by the HPGCL has been reproduced at para 7 of the present Order. Hence, the same is not being repeated here. The Commission, in its TO dated 07/03/2019 (case no. HERC/PRO 59 of 2018) had approved Rs. 90.54 Cr, Rs. 260.61 Cr and Rs. 886.92Cr and Rs. 875.40 Cr for FY 2018-19, FY 2019-20, FY 2020-21 & FY 2021-22 respectively. This included an investment of Rs. 140 Cr for installation of low NoX burners and Secondary Over Fire Air (SOFA) Dampers in FY 2019-20 and Rs.870Cr each as investment in FY 2020-21 & FY 2021-22 for installation of FGDs in its plant of PTPP, DCRTPP and RGTP for which the Hon'ble Commission has already given in principal approval. The matter was also referred to CEA. In response to HPGCL request to CEA seeking suggestion on technology and indicative cost of installation of FGD at its plants on the technical aspects the recommendation have been submitted.

As regard to CAPEX-OPEX relation in reference to remaining plant life and its plant load factor and the So2 removal efficiency, CEA has recommended that PTPS, Panipat needs to undertake lifecycle cost benefit analysis and check its technical feasibility before obtaining either of the dry sorbent injection technology, ammonia based FGD or the wet limestone based FGD. As per indicative base cost estimation done by CEA, for wet limestone base FGD the cost works out to be Rs 0.45Cr/MW taxes and duty extra. For ammonia based FGD technology it is around 10% less (0.40Cr/MW) and the cost for dry FGD the capex vary from Rs. 0.15 Cr to Rs. 0.40 Cr per MW. The OPEX cost which include regent cost, additional water consumption, man power cost, auxiliary power consumption, by product handling cost and revenue earned through disposal of by product, should be kept as low as possible by reducing APC & producing good quality by product.

As per advice of CEA PTPS, Panipat is required to undertake the study of the cases of future of all lining material used for corrosion protection for various sections of FGD system. The life cycle cost analysis for selection of this material may also be done considering these factors for optimum selection.

HPGCL has opted for dry sorbent injection technology FGD for its PTPS, Panipat and DCRTPS, Yamunanagar and for wet limestone FGD system for its RGTPP project which are suitable to limit So2 below environment norms with upto 0.5% Sulphur content in coal. **HPGCL needs to submit the status of progress of all activities of installation starting from bidding stage till commissioning of FGD to the commission on quarterly basis**.

The Commission further observes that in the revised capital investment plan submitted by HPGCL for FY 2019-20, FY 2020-21 & FY 2021-22 the capital investment of Rs. 132.07Cr has been proposed against an approval of Rs.260.61 Cr & Rs. 966.01Cr, for FY 2019-20 proposed for capital expenditure against the approval of Rs. 886.92 Cr by the Commission vide its order dated 07/03/2019 in respect of ARR for FY 2019-20. The basic reason for this revision is shifting of expenditure to the tune of Rs.135Cr of installation of lower NoX burner and SOFA at RGTPP, DCRTPP, and PTPS 7-8 units from FY 2019-20 to FY 2020-21 and preponing the expenditure of Rs 69Cr approx. with regard to installation of FGD in RGTPP, DCRTPP and PTPS 6, 7,8 to FY 2019-20.

In addition, during FY 2019-20 the expenditure for ERP system and allied works is revised shown to be 9.5 Cr against the approval of Rs. 25 Cr and also the following works have been deferred (dust suppression system at ash dyke of RGTPP. Further, construction of 2no. barracks for CISF, installation of CCTV surveillance system, construction of DAV school in RGTPP and the work of revival of firefighting system and replacement of unit 6 AD line and repair of D2 of ASP field and upgradation of HMI system unit 6 of pro control supplied by the message BHEL and energy management system PTPS unit 7&8) to be done in 2019-20, have been deferred.

The Commission further observes that HPGCL has revised the capital expenditure for abatement of NoX level in its plants from Rs. 139 Cr. to Rs. 79 Cr. to be incurred in FY 2019-20, FY2020-21 and FY 2021-22.

In view of above the commission approves the capital expenditure for FY 2019-20, FY2020-21 and FY 2021-22 and 2022-23 as proposed in the scheme wise revised Capex Plan reproduced in a tabular format at Para 7.3 of the present Order i.e. 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. **The Petitioner is directed to keep the Commission**

informed regarding the scheme wise / year wise physical and financial progress of the Capex approved by the Commission including any work wise deviations from the same.

23 Technical Parameters

Gross Generation and PLF): -

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

Annual Generation Trend (MU)

Unit	2016-17	2017-18	2018-19	2019-20 (up to Sept)	Avg. Of Last 3 FY
PTPS 5	169.22	140.77	176.75	--	162.24
PTPS-6	219.54	373.69	324.00	--	305.74
PTPS 7	1126.89	1277.64	1308.75	610.17	1237.76
PTPS-8	690.27	787.37	1569.40	775.25	1015.68
DCRTPP-1	1841.43	1441.36	1346.78	1133.37	1543.19
DCRTPP-2	1582.78	2006.76	1974.87	991.79	1854.80
RGTPP-1	1988.50	2361.50	1622.71	587.64	1990.90
RGTPP-2	1816.83	2319.51	2229.48	593.44	2121.94
HPGCL Thermal	9435	10709	10553	4692	10232
Hydel	205.28	176.75	237.68	159.16	206.67

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

Unit wise PLF Trend (%)

Unit #	2016-17	2017-18	2018-19	2019-20 (up to Sept)	Avg. Of Last 3 FY
PTPS 5	9.20	7.65	9.61	--	8.82
PTPS-6	11.93	20.31	17.61	--	16.62
PTPS 7	51.46	58.34	59.76	55.57	56.52
PTPS-8	31.52	35.95	71.66	70.61	46.37
DCRTPP-1	70.07	54.85	51.25	86.02	58.72
DCRTPP-2	60.23	76.36	75.15	75.27	70.58
RGTPP-1	37.83	44.93	30.87	22.30	37.88
RGTPP-2	34.57	44.13	42.42	22.52	40.37
HPGCL Thermal	39.60	44.94	44.29	39.27	42.94
Hydel	37.55	32.33	43.48	58.07	37.79

HPGCL has submitted as under: -

That the annual generation has dipped primarily due to large and frequent backing down by the Discoms as they are getting about 70% of their power requirement for onward supply to the electricity consumers from the sources other than HPGCL at the rates, terms & conditions of the long terms PPAs.

HPGCL plants faces massive backing downs due to the unfair system of deciding the merit order dispatch which needs to be reviewed for providing just & equitable opportunity to the State Generator due to the reasons as submitted.

That the massive and frequent backing downs of the HPGCL generating stations not only increases the start and stop operation of the plant but also severally affects the performance parameters of the generating units. It ultimately damages the State Assets significantly which remains idle due to its non-scheduling.

That the Number of start and stop operations due to the instructions of the beneficiary during past three years i.e. FY 2016-17 to FY 2018-19 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 2016-17	3	6	12	12	5	6	9	7
FY 2017-18	4	8	12	14	4	5	11	8
FY 2018-19	8	12	15	8	8	6	9	10
Average Start-stop	5	9	13	11	6	6	10	8

That 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 HPGCL generating stations as submitted by them is given below: -

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

Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
PTPS – 1-4	3193.45	2686.47	-	-		
PTPS – 5-6	2413.74	3084.65	3266.83	2585.99	3149.31	1844.64
PTPS – 7-8	1368.23	2671.46	2468.22	1794.27	1450.27	764.54
DCRTPP	585.38	1081.53	1373.34	1064.52	1092.96	366.19
RGTPP	2304.23	4184.4	6011.54	5170.54	5607.40	4085.72
Overall %	35.55%	51.53 %	55.06 %	44.55 %	47.42 %	59.11

The above reveals that HPGCL generating plants are facing massive backing down in the last five years which is continuously increasing since 2014-15 and has touched the alarming level. In FY 2018-19 the backing down percentage was 47.42% which has increased to 59.11% of the installed capacity in FY 2019-20.

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

While the HPGCL generating units are backed down, there are certain auxiliaries that are necessary to be run at part load as well as full load, which leads to higher auxiliary consumption for the reduced generation or no generation for which no variable cost is being recovered from the beneficiaries.

Turbine Cycle heat rate of plants rise with fall in loading of the plant and hence backing down increases SHR of the plant leading to inefficiency.

Due to the unplanned backing down, the coal consumption reduces significantly and leads to piling up of coal stock at the plants. The coal companies generally have erratic coal supply schedules, which are beyond the control of HPGCL.

Backing down also affects the operational life due to increase in start-stop operation and cycling of units from full load to partial load and vice-versa. The same also undermines efficiency of the power plants, consequently increasing the repair and maintenance expenses.

Backing down also leads to stacking of coal in HPGCL plants. Prolonged stacking of coal leads to problems like smouldering of coal stock and moisture ingress which leads to decrease in coal GCV which still further increase variable cost of HPGCL plants and forms a viscous circle with backing down.

HPGCL has proposed NAPAF of its plants for the FY 2019-20 as approved by the Commission in the Tariff Order for FY 2019-20 and for the FY 2020-21, it has proposed as per the MYT Regulation, 2019. Summary of the same is presented below: -

NAPAF for FY 2019-20and FY 2020-21

S. No	Unit	Approved	Proposed	
		FY 19-20	FY 19-20	FY 20-21
1	PTPS 6	35.00%	35.0%	85.00%
2	PTPS 7	85.00%	85.00%	85.00%
3	PTPS 8	85.00%	85.00%	85.00%
4	DCRTPS 1	85.00%	85.00%	85.00%
5	DCRTPS 2	85.00%	85.00%	85.00%
6	RGTPS 1	85.00%	85.00%	85.00%
7	RGTPS 2	85.00%	85.00%	85.00%
8	WYC Hydel	43.50%	43.50%	46.00%

It has been further submitted that the Commission is allowing CUF for the WYC, Hydel project @50% of the availability of the machine as per the Capital Overhauling Schedule submitted by the HPGCL. HPGCL is expecting to get its all machine overhauled up to FY 2020-21. Overhauling of last C-2 machine is expected to complete in the second quarter of the FY 2020-21 as such HPGCL is proposing for an optimistic CUF of 46% for WYC in FY 2020-21.

HPGCL has provided the actual performance of the generating stations for the past years including first six months of FY 2019-20 as follows: -

Table: PLF for past 6 years (%)

Unit	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (end Sept. 2019)
PTPS 5-6	32.34	9.02	10.57	13.98	13.61	-
PTPS 7-8	62.48	31.00	41.49	47.15	65.71	63.09
DCRTPS	66.89	76.97	65.15	65.60	63.20	80.65
RGTPS	54.42	44.21	36.20	44.53	36.65	22.41
HPGCL Thermal	**49.15**	**39.18**	**39.60**	**44.94**	**44.29**	**39.27**
Hydel	32.58	43.38	37.83	32.33	43.48	58.07

Haryana Power Generation Corporation Limited

Unit-wise PLF and Deemed PLF of HPGCL Units

Unit	2016-17		2017-18		2018-19		2019-20 (upto Nov)	
	PLF (%)	Deemed PLF (%)	PLF (%)	Deemed PLF (%)	PLF (%)	Deemed PLF (%)	PLF (%)	Deemed PLF (%)
PTPS 5	9.2	99.51	7.65	85.64	9.61	99.01	-	100
PTPS-6	11.93	99.21	20.31	82.89	17.61	99.41	-	100
PTPS 7	51.46	97.3	58.34	94.81	59.76	98.79	48.61	96.68
PTPS 8	31.52	98.38	35.95	76.49	71.66	98.79	61.13	99.89
DCRTPP-1	70.07	96.48	54.85	95.22	51.25	98.85	67.74	100.96
DCRTPP-2	60.23	86.07	76.36	97.49	75.15	69.51	59.67	78.74
RGTPP-1	37.83	100.32	44.93	89.94	30.87	98.48	21.88	95.05
RGTPP-2	34.57	86.46	44.13	89.49	42.42	83.48	22.59	100.64
HPGCL Thermal	39.6	94.66	44.94		44.29	96.49	33.95	96.49
Hydel	37.55		32.33		43.48	91.71	58.39	

Break down/Tripping due to Backing down / Annual Shut down to Capital over hauling

2017-18	PTPS Panipat				DCRTPS Yamuna Nagar		RGTPS Hisar	
	Unit -5	Unit-6	Unit -7	Unit -8	Unit -1	Unit-2	Unit -1	Unit -2
Forced Outage Hours	1225	608	161	328	572	347	428	1079
Backing Down Hours	6781	5368	2759	3714	1292	806	3291	2530
Annual Capital Mtc. hours	0	885	273	1294	1416	0	0	0

2018-19	PTPS Panipat				DCRTPP Yamuna Nagar		RGTPP Hisar	
	Unit -5	Unit-6	Unit -7	Unit -8	Unit -1	Unit-2	Unit -1	Unit -2
Forced Outages (No.)	0	1	9	5	7	5	10	4
Forced Outage Hours	0	52	107	118	1825	204	1301	456
Tripping due to Backing Down	8	12	15	8	8	6	9	10
Backing Down Hours	7787	7067	2941	1795	1066	1205	3959	3549
Annual Capital Mtc. hours	0	0	0	0	0	858	0	0

2019-20 (ending No. 2019)	PTPS Panipat				DCRTPP Yamuna Nagar		RGTPP Hisar	
	Unit -5	Unit-6	Unit -7	Unit -8	Unit -1	Unit-2	Unit -1	Unit -2
Forced Outages (No.)	0	0	3	2	3	6	5	1
Forced Outage Hours	0	0	183	2	67	577	382	5

Tripping due to Backing Down	0	0	7	6	3	2	6	7
Backing Down Hours	5856	5856	2471	1822	1413	635	3681	3998
Annual Capital Mtc. hours	0	0	0	0	0	720	0	0

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, as submitted by the Petitioner, 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 Discom's 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 HPGCL has proposed the NAPF (PLF) of its plants as per norms for the FY 2020-21, thus, the Commission approves the PLF for HPGCL for FY 2020-21 as proposed and in line with the MYT Regulations except PTPS Unit - 6.

Specific Oil Consumption

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

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

Unit	2016-17	2017-18	2018-19	2019-20 (up to Sept)	Avg. Of Last 3 FY
PTPS 5	2.22	4.04	2.94	--	3.01
PTPS-6	2.11	2.60	1.77	--	2.19
PTPS 7	0.78	0.61	0.62	0.48	0.67
PTPS-8	1.02	1.26	0.36	0.40	0.74
DCRTPP-1	0.59	0.54	0.92	0.18	0.67
DCRTPP-2	0.86	0.47	0.25	0.33	0.50
RGTPP-1	0.48	0.49	0.85	0.86	0.58
RGTPP-2	0.62	0.74	0.46	1.40	0.61
HPGCL	0.74	0.74	0.63	0.53	0.70

From the Specific Oil Consumption given above and the PLF as provided, 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. During the FY 2019-20 (up to Sept. 2019) it can be seen that the PLF of DCRTPS remained at around 80% and is able to achieve the new norms of oil (0.5 ml/Kwh) while in case of RGTPS the PLF remains at around 22.0 % and the same is not able to achieve the existing oil norms (1.0 ml/kwh).

Secondary Fuel Consumption (SFC)

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 2019-20and FY 2020-21

S. No	Unit #	Approved	Proposed	
		FY2019-20	FY 2019-20	FY 2020-21
1	PTPS 6	1.00	1.00	1.00
2	PTPS 7	1.00	1.00	0.50
3	PTPS 8	1.00	1.00	0.50
4	DCRTPPS1	1.00	1.00	0.50
5	DCRTPS 2	1.00	1.00	0.50
6	RGTPS 1	1.00	1.00	0.50
7	RGTPS 2	1.00	1.00	0.50

HPGCL has submitted that Hon'ble Commission has reduced the oil norms to 0.5 ml/Kwh from the existing 1.0 ml/kwh. From the preceding paras it reveals that HPGCL Generation Stations can only achieve the new oil norms if the Scheduling/PLF remains at least around 65 %, whereas average scheduling/PLF during past three years remains in the range of 40- 45% only. As such in the present scenario new norms of the specific oil consumptions as per HERC, MYT Regulation 2019 is unachievable/unrealistic for HPGCL Generating Units.

HPGCL has requested the Commission that new oil norms may be reviewed keeping in view of its achievability. HPGCL is committed to generate power at the minimum cost, if deem fit Hon'ble Commission may keep the new norms as a pilot study with the appropriate provision for truing up of the oil cost as per actual oil consumption restricted to existing oil norms (1.0 ml/Kwh), so that HPGCL can recover at least its legitimate oil cost.

The Unit-wise specific oil consumption of HPGCL plants for past 6 years is as under:-

Unit wise Specific Oil Consumption (ml/kWh)

Units	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (end Sept. 2019)
PTPS - 5	1.60	1.95	2.22	4.04	2.94	-
PTPS - 6	1.63	3.91	2.11	2.60	1.77	-
PTPS - 7	0.72	1.39	0.78	0.61	0.62	0.48
PTPS - 8	0.61	0.91	1.02	1.26	0.36	0.40
DCRTPS-1	0.51	0.50	0.59	0.54	0.92	0.10
DCRTPS-2	1.05	0.48	0.86	0.47	0.25	0.33
RGTPS-1	0.28	0.66	0.48	0.49	0.85	0.86
RGTPS-2	0.56	0.69	0.62	0.74	0.46	1.40
HPGCL					0.63	0.53

The Commission observes that the specific oil consumption of the HPGCL plants during FY 2018-19 have been 2.36%, 0.48%, 0.64% and 0.65% for PTPS units -6, PTPS units 7-8, DCRTPS units 1 & 2, RGTPS units 1 & 2 respectively.

During FY 2019-20 till Sept. 2019. The specific oil consumption achieved is 0.4% for PTPS unit 7-8 for DCRTPS units it is 0.22 but for RGTPP units 1 & 2 it is 1.13% which is much above the norms. The petitioner has attributed the higher Sp. Oil consumption for its plants due to low PLF due to less scheduling and more nos. of start / stop operations. HPGCL is required to device 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 Consumption

The table below shows the Historical unit wise Auxiliary Consumption:

Historical Unit wise Auxiliary Consumption

Unit	2016-17	2017-18	2018-19	2019-20 (up to Sept)	Avg. Of Last 3 FY
PTPS 5	15.95	16.12	14.81	--	15.59
PTPS-6	12.52	10.61	10.54	--	11.04
PTPS 7	9.20	8.97	8.65	9.05	8.93
PTPS-8	10.0	9.48	8.30	8.70	8.99
DCRTPP-1	8.67	8.62	8.69	8.16	8.66
DCRTPP-2	8.90	8.36	8.35	8.50	8.51
RGTPP-1	6.03	5.92	6.54	7.19	6.12
RGTPP-2	6.12	5.89	5.89	6.95	5.91
HPGCL	8.04	7.66	7.80	8.30	7.83

It has been submitted that HPGCL is operating its plant at the optimum efficiency. The Auxiliary consumption of DCRTPP and RGTPP is marginally higher whereas the Auxiliary consumption of PTPS is considerably higher due to the following reasons: -

i) Actual Scheduling of the Generating plants remains considerably low in the range of 40-45% due to backing down/ boxing up of the plant, but during such period key auxiliaries have to be kept functioning despite the fact that there is less generation or no generation.

ii) The norms given by the Hon'ble Commission are also stringent and without giving any consideration to the type of coal mills.

PTPS Unit- 6, 7 & 8 has Tube type of Coal Mills. In CERC MYT Regulations a provision of additional auxiliary consumption of 0.8 % has been kept for such type of plants. Hon'ble Commission had also made such provision in its draft MYT Regulation, 2019 but the same was missing in the HERC MYT Regulation, 2019. HPGCL has submitted to the Hon'ble Commission vide HPGCL memo no. 1843/HPGCL/FIN/REG-478 Dated: 13 /11/2019 for making appropriate provision for the same in the Regulation. The decision of the Hon'ble Commission in the matter is yet awaited. HPGCL requests that the relaxation if any considered by the Hon'ble Commission in the Aux. Cons. of the plants having tube type coal mills be also applied for Generation Tariff determination for FY 2020-21.

HPGCL has proposed Auxiliary consumption for FY 2020-21 in line with the already approved for FY 2019-20 by the Commission as tabulated below:-

Auxiliary Consumption (%) as proposed by HPGCL for FY 2019-20 and FY 2020-21

S. N	Unit #	Approved	Proposed	
		FY19- 20	FY19- 20	FY 20-21
1	PTPS 6	10.00%	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 following table provides the trend in the auxiliary energy consumption for HPGCL plants for the last five years: -

Unit wise Auxiliary Consumption (%) for last 5 years

Plants	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (end Sept. 2019)
PTPS -5	12.67	14.33	15.95	16.12	14.81	-
PTPS -6	11.24	14.34	12.52	10.61	10.54	-
PTPS -7	10.10	10.84	9.20	8.97	8.65	9.05
PTPS -8	9.67	9.34	10.00	9.48	8.30	8.70
DCRTPS-1	8.66	8.45	8.67	8.62	8.69	8.16
DCRTPS-2	8.97	8.66	8.90	8.36	8.35	8.50
RGTPS-1	5.99	5.88	6.03	5.92	6.34	7.19
RGTPS-2	5.65	5.75	6.12	5.89	5.89	6.95

The Commission observes that HPGCL in the FY 2017-18 though, have been able to achieve the Aux. Consumption as per norms for its plants at DCRTPS and RGTPS but failed to achieve the target for PTPS units 6,7 and 8. During FY 2018-19 the petitioner has been able to achieve the aux. consumption as per norms marginally. However, in FY 2019-20 till Sept. 2019 the Aux. Consumption for RGTPS unit 1 &2 has been 7.19% and 6.95 % which is higher than the norms of 6% for RGTPS. As regard DCTRPP the HPGCL try to remain within norms but again for PTPS unit 7 & 8 the Aux. Consumption is 9.05 % and 8.70 respectively.

The Commission further observes that for FY 2020-21 HPGCL has proposed Aux. Consumption as approved for FY 2019-20 with the request to further relax the same for PTPS units 7 & 8 in line with CERC Regulations and have requested for provision of 0.8% additional Aux. consumption on account of tube type coal mill in these units. **The Commission does not find merit in the submissions and expects HPGCL to achieve the norms as provided in the MYT Regulations, 2019 which was notified after due deliberations with the stakeholders for the Control Period beginning the FY 2020-21.**

Station Heat Rate

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

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

Unit	2016-17	2017-18	2018-19	2019-20 (up to Sept)	Avg. Of Last 3 FY
PTPS 5	2499	2721	2566	---	2588
PTPS-6	2519	2653	2540	---	2581
PTPS 7	2478	2562	2473	2479	2505
PTPS-8	2465	2551	2468	2476	2489
DCRTPP-1	2315	2321	2327	2327	2320
DCRTPP-2	2317	2317	2319	2331	2318
RGTPP-1	2589	2523	2461	2477	2528
RGTPP-2	2573	2505	2419	2456	2494
HPGCL	2462	2467	2415	2407	2448

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 adverse conditions of high backing down. However, despite above, in case of RGTPP it remains beyond the regulatory norms due to the reasons that during the FY 2018-19 RGTPP's loading as a percentage of plant capacity was around 77.60% which is significantly low. The Station Heat Rate for FY 2020-21 has been proposed as per norms specified in HERC MYT Regulations, 2019 is as under:

SHR (kCal/kWh) FY 2019-20 and FY 2020-21

S. No	SHR (kcal/kWh)	Approved	Proposed	
		FY 2019-20	FY 2019-20	FY 2020-21
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 unit wise station Heat rate of HPGCL plants for the past 6 years is as under: -

Unit wise Station Heat Rate (in Kcal/kwh) for last 6 years

Units	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (end Sept. 2019)
PTPS-5	2537	2548	2499	2721	2566	-
PTPS-6	2546	2514	2519	2653	2540	-
PTPS-7	2482	2495	2478	2562	2473	2479
PTPS-8	2464	2491	2465	2551	2468	2476
DCRTPS-1	2337	2331	2315	2321	2327	2327
DCRTPS-2	2341	2328	2317	2317	2319	2331
RGTPS-1	2387	2384	2589	2523	2461	2477
RGTPS-2	2395	2392	2573	2505	2419	2456
HPGCL					2415	2407

The Commission observes that HPGCL has been able to maintain SHR for its plants as per norms except for RGTPS units 1 & 2 where in 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.**

Gross Calorific Value (GCV) and Price of fuel

The GCV and cost of coal and secondary fuel (oil) has been proposed for FY 2020-21 as per the actual weighted average calorific value of coal for PTPS, DCRTPS and RGTPS during April to Sept. of FY 2019-20 as under: -

Gross Calorific Value and landed Coal Cost

Particulars	PTPS	DCRTPS	RGTPS
Gross Calorific Value of Coal (kcal/Kg)	3810	3619	3539
Average landed cost of Coal (Rs/MT)	5118	5118	5142

Gross Calorific Value & cost of Oil

Particulars	PTPS	DCRTPP	RGTPP
Gross Calorific Value of oil (kcal/KL)	10460	10458	10586
Average landed cost of oil (Rs/kL)	51515	52736	51156

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 2020-21.

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 – 6	35#	2550	9#	1	5118/3810	51515/10460
PTPS - 7	85	2500	8.5	0.5	5118/3810	51515/10460
PTPS - 8	85	2500	8.5	0.5	5118/3810	51515/10460

DCRTPS - 1	85	2344	8.5	0.5	5118/3619	52736/10458
DCRTPS - 2	85	2344	8.5	0.5	5118/3619	52736/10458
RGTPS - 1	85	2387	6	0.5	5142/3539	51156/10586
RGTPS - 2	85	2387	6	0.5	5142/3539	51156/10586
WYC HEP	46	-	1	-	-	-

It has been observed that PTPS Unit – 6 reported an average PLF in the last three financial year of 16.62% i.e. ranging from 11.93% to 20.31%. Hence, for most part of the year the Unit remains boxed – up. The Commission observes that on the one hand it may not be viable to operate the Unit at such low PLF for HPGCL and on the other hand, given the robust power market including the Power Exchange (s), if required, the Discoms have the option of meeting any short – term exigencies during the peak period / months from the market or better by vigorously adopting demand side measure to even out the peak demand. Consequently, the PLF of Unit – 6 has been kept at 35% in line with the previous Order of the Commission as against the norm and proposal of HPGCL of 85%.

Resultantly, the Energy Charges / Variable Charges for the FY 2020-21 calculated on the basis of the approved parameters / cost (Unit Wise) is presented below that follows: -

HERC Energy Charges / Variable Charges for the FY 2020-21

Parameters	Unit	Derivation	PTPS			RG TPS		DCR TPS		WYC
			Unit 6	Unit 7	Unit 8	Unit 1	Unit 2	Unit 1	Unit 2	
Installed Capacity (MW)			210	250	250	600	600	300	300	62.4
Gross Generation	MU	A	643.86	1,861.50	1,861.50	4,467.60	4,467.60	2,233.80	2,233.80	251.45
PLF (%)			35.00	85.00	85.00	85.00	85.00	85.00	85.00	46 #
Auxiliary Energy Consumption	%		9.00%	8.50%	8.50%	6.00%	6.00%	8.50%	8.50%	1.00%
Generation (Ex-bus)	MU	A1	585.91	1703.27	1703.27	4199.54	4199.54	2043.93	2043.93	248.93
Station Heat Rate (SHR)	Kcal/kwh	B	2550	2500	2500	2387	2387	2344	2344	
Specific Oil Consumption	ml/kwh	C	1	0.5	0.5	0.5	0.5	0.5	0.5	
Gross Calorific Value of Oil	Kcal/litre	D	10460	10460	10460	10586	10586	10458	10458	
Gross Calorific Value of Coal	K.cal/Kg	E	3810	3810	3810	3539	3539	3619	3619	NA
Overall Heat	G.cal	F=(A*B)	1641843	4653750	4653750	10664161	10664161	5236027	5236027	NA
Heat from Oil	G.cal	G=(A*C*D)/1000	6735	9736	9736	23647	23647	11681	11681	NA
Heat from Coal	G.cal	H= (F-G)	1635108	4644014	4644014	10640514	10640514	5224347	5224347	NA
Oil Consumption	KL	I=G*1000/D=A*C	644	931	931	2234	2234	1117	1117	NA
Coal Consumption	MT	J=(H*1000/E)	429162	1218901	1218901	3006644	3006644	1443588	1443588	NA
Cost of Oil per KL	Rs/KL	K	51515	51515	51515	51156	51156	52736	52736	NA
Cost of Coal	Rs/MT	L	5118	5118	5118	5142	5142	5118	5118	NA
Total Cost of Oil #	Rs .Mln	M=(K*I)/10^6	33.17	47.95	47.95	114.27	114.27	58.90	58.90	
Total Cost of Coal	Rs.Mln	N=(J*L)/10^6	2196.45	6238.34	6238.34	15460.17	15460.17	7388.29	7388.29	NA
Total Fuel Cost	Rs.Mln	O=M+N	2229.62	6286.28	6286.28	15574.44	15574.44	7447.19	7447.19	NA
Fuel Cost/Kwh	**Rs.**	**P=O/A1**	**3.81**	**3.69**	**3.69**	**3.71**	**3.71**	**3.64**	**3.64**	**NA**

as proposed by HPGCL.

HERC Fixed Cost Computation (FY 2020-21) Rs. Million

EXPENSES	PTPS -6	PTPS -7	PTPS - 8	RGTPS 1	RGTPS 2	DCR TPS 1	DCR TPS 2	WYC	TOTAL
Operation & Maintenance (O&M)									
a) R&M Expenses	85.10	261.19	261.19	247.58	247.58	299.66	299.66	29.36	1731.33
b) A&G Expenses	15.58	40.05	40.05	43.08	43.08	28.57	28.57	5.85	244.83
c) Employees Cost (excl. Employee Cost of PTPS Units 1 to 5)	768.12	703.93	703.93	1008.59	1008.59	744.51	744.51	229.55	5911.75
Total O&M (a+b+c):	868.80	1005.17	1005.17	1299.26	1299.26	1072.75	1072.75	264.76	7887.91
Depreciation	66.90	286.70	297.80	269.60	273.20	1022.40	1019.10	92.80	3328.50
Interest & Finance	30.30	33.40	33.70	365.70	358.40	15.20	13.40	12.30	862.40
W/C Interest	53.27	116.96	117.05	260.95	260.95	140.58	140.58	6.34	1096.68
Fixed Cost	**1019.27**	**1442.23**	**1453.71**	**2195.51**	**2191.81**	**2250.93**	**2245.83**	**376.20**	**13175.49**

Note - 1: As PTPS Unit – 6 is unlikely to be scheduled given the past trend, R&M and A&G expenses for the said Unit has been reduced to 50%. Due to high variable cost, unit no. VI is unlikely to be scheduled as per Merit Order Despatch. Accordingly, it is advised that a decision regarding phasing out unit – VI be taken at the earliest.

Note – 2: Employees Cost of PTPS Units 1-5 (de-commissioned) Units have been reduced from the base year i.e. FY 2017-18 for the purpose of projections.

Note – 3: As per the MYT Regulations, 2019, ROE upto 14% can be allowed on the eligible Equity Capital in use. The Commission, taking a holistic view of the power sector in Haryana including the tariff payable by the electricity consumers had traditionally restricted the RoE to 10% in order to cushion the tariff shock to the consumers. In FY 2020-21, given the unprecedented situation emanating from the COVID-19 pandemic and the resulting restriction/lockdown ordered by Central Government/State Government, all economic activities came to a standstill. Resulting, the ability to pay of all categories of consumers has been significantly reduced. The pandemic has impacted income, earnings and employment of all categories of consumers be it domestic consumers, industrial/commercial consumers. As far as Government connections are concerned i.e. Public Water Works, Street Light, Lift Irrigation as well as general connections in Government Offices and building, it is also a fact that due to significant reduction in revenue from direct/indirect taxes and levies, their ability to pay, has also been impaired. Hence, the Commission, after due deliberations, has considered not to allow any RoE in the FY 2020-21.

Note – 4 : Interest on term loan has been taken as per the existing loan profile of HPGCL i.e. post restructuring, which shall be subject to true-up.

HERC COMPUTATION OF WORKING CAPITAL AND INTEREST FY 2020-21 (Rs. Million)								
ITEMS	**DERIVATION**		**PTPS**		**RGTPS**	**DCR TPS**		
		Unit 6	**Unit 7**	**Unit 8**	**Unit 1 & 2**	**(Unit 1 & 2)**	**WYC**	**TOTAL**
Coal Stock	1 months	183.04	519.86	519.86	2576.69	1231.38	0	5030.84
Oil Stock	1 months	2.76	4.00	4.00	19.045	9.82	0	39.62
O&M Expenses	1 months	72.40	83.76	83.76	216.54	178.79	22.06	657.33
Maint. Spares	10%/7.5% of O&M	86.88	100.52	100.52	259.85	214.55	19.86	782.17
Receivables	1 month	270.74	644.04	645.00	2961.35	1615.93	31.35	6168.41
W/C Requirement		615.82	1352.18	1353.14	6033.48	3250.47	73.27	12678.36
Int (@ 8.65% (7.40+1.25) %		53.27	116.96	117.05	521.90	281.17	6.34	1096.68
(Rs. Million)		PTPS 6	PTPS 7	PTPS 8	RGTPS 1&2	DCR TPS	WYC	Total
Total Coal Cost		2196	6238	6238	30920	14777	0	60370
1 months Coal		183	520	520	2577	1231	0	5031
Total Oil Cost		33	48	48	229	118	0	475
1 months Oil		3	4	4	19	10	0	40
O&M Expenses		869	1005	1005	2599	2145	265	7888
1 mts O&M Expenses		72	84	84	216.54	179	22	657
Maint. Spares (%age)		0.10	0.10	0.10	0.10	0.10	0.075	
Maint. Spares		87	101	101	259.85	214.55	20	782
Rec Tot VC		2230	6286	6286	31149	14894	0	60845
1 mts VC		186	524	524	2596	1241	0	5070
1 mts FC		85	120	121	366	375	31	1098
Rec 1mt Fc+1 Vc		**271**	**644**	**645**	**2961**	**1616**	**31**	**6168**

The Working Capital and interest thereto have been computed in as per the provisions of the MYT Regulations, 2019. In view of COVID-19 pandemic, the Reserve Bank of India has reduced the repo rate on 27.03.2020. Resultantly, State Bank of India reduced its 1 year MCLR rate to 7.40%, w.e.f. 10.04.2020. Accordingly, in order to pass on the benefit of reduced rate of interest to the ultimate consumers, the rate of interest on the working capital requirement as computed in the table above has been taken @ of MCLR (7.40%) and a margin of 125 basis point. Resultantly, the allowed rate of interest for the purpose of working out interest amount has been considered @ 8.65%.

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

TARIFF	PTPS -6	PTPS -7	PTPS - 8	RGTPS 1	RGTPS 2	DCR TPS 1	DCR TPS 2	WYC	TOTAL
Fuel Cost Rs/kWh	3.81	3.69	3.69	3.71	3.71	3.64	3.64	-	3.64
Fixed Cost Rs. Million)	1019.27	1442.23	1453.71	2195.51	2191.81	2250.93	2245.83	376.20	13175.49

The recovery of fixed charges to the extent determined above, by the Commission, for the FY 2020-21 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 required to be implemented in line with Central Generating Stations (CGS) for absorption of renewable energy (to meet RPO or otherwise). Hence, the Commission directs HPGCL to gear up by adoption of appropriate technology in next six months and submit data / details for the consideration of the Commission.

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 2020-21 shall be implemented w.e.f. 01.04.2020. Case No. HERC/PRO-58 of 2019 Case No. HERC/PRO-12 of 2020 Case No. HERC/PRO-13 of 2020 are accordingly disposed of.

This Order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 24th April, 2020.

Date: 24.04.2020	(Naresh Sardana)	(Pravindra Singh Chauhan)	(D.S. Dhesi)
Place: Panchkula	Member	Member	Chairman