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

Petition No. 54 of 2022 Date of Order: 11.07.2023

Filing of petition for Business Plan including Capital
Investment Plan for 3 rd MYT Control Period from FY
2023-24 to FY 2025-26 for EPPL's 100 MW Malana-II
Hydro Electric Project situated in Himachal Pradesh.

In the matter of: Everest Power Private Ltd. (EPPL), having its registered office at House No. C-35, Sector-II, Phase-1 main Road new Shimla, Himachal Pradesh – 171009.

Petitioner

Versus

- 1. M/s Punjab State Power Corporation Limited.
- 2. PTC India Limited, 2 nd Floor, NBCC Tower, 15, Bikaji Kama Place, New Delhi.

Respondents

- Present: Sh. Viswajeet Khanna, Chairperson Sh. Paramjeet Singh, Member
- EPPL: Sh. Siva Muthu Arcot
 - Sh. Rakesh H. Shah
- PSPCL: Sh. Anand.K.Ganesan, Advocate
 - Sh. Rupinderjit Randhawa, CE & ARR

ORDER

 The Petitioner (EPPL) has filed the present petition seeking approval of the Business Plan including Capital Investment Plan for 3rd MYT Control Period of FY 2023-24 TO FY 2025-26 for its 100 MW MalanaII Hydroelectric Project (Project) situated in district Kullu, Himachal Pradesh. The Project started commercial operations on 12th July, 2012. The entire power generated by the Project after deducting the auxiliary consumption and free power to Government of Himachal Pradesh (GoHP), is being sold to Punjab State Power Corporation Limited (PSPCL) through PTC. The tariff for the Project is being determined by the PSERC as per the applicable PSERC Regulations.

- 1.1 EPPL has submitted that the Business Plan including CIP for the 3rd MYT Control Period has been prepared based on the available data for previous years and future projections for the generation targets and other relevant assumptions. Revenues from sale of power from the 100MW Malana –II Project is the only source of income for the Project. It has been prayed that the Commission may be pleased:
 - "a) To condone delay of 10 days in filing of Petition for Business Plan including Capital Investment Plan for its Generation business for Control Period from FY 2023 –24 to FY 2025 –26 in accordance with Regulation 9 of the PSERC MYT Regulations, 2019;
 - b) To admit the Petition seeking approval of Business Plan including Capital Investment Plan for its Generation business for Control Period from FY 2023-24 to FY 2025-26 in accordance with Regulation 9 of the PSERC MYT Regulations, 2019;
 - c) To approve the Business Plan including Capital Investment Plan for its Generation business for Control Period from FY 2023-24 to FY 2025-26 as proposed by the Petitioner.
 - d) To pass any other order(s) as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice;

- e) To condone any error/omission and to give opportunity to rectify the same;
- f) The filing is being done based on the best available information and in case of any change, the Petitioner may be permitted to make further submissions, addition and alteration to this Petition as may be necessary from time to time."
- **1.2** After hearing the Petitioner on admission on 16.11.2022, delay in filing of petition was condoned and the petition was admitted vide Order dated 18.11.2022, with observations as under:

"The Commission notes that PSERC (Terms & Conditions for Determination of Generation, Transmission, Wheeling & Retail Supply Tariff) Regulations, 2022, applicable for MYT control period from FY 2023-24 to FY 2025-26, have been notified recently. The petition involves public interest and accordingly public notice as required under Regulation 67 of the Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005. The petitioner shall furnish the following information/clarifications and also publish a public notice for inviting objections/suggestions from any interested party within a week:

- a) Regulation 9.9 specifies that; the capital investment plan shall match with:
 - "i) Capacity addition during the Control Period;
 - *ii)* Renovation and modernisation of the generating plant as allowed in CERC Regulations;"

The submissions of the petitioner do not indicate any change in its Capacity or efficiency during the Control Period. It needs to show that, its Schemes proposed under R&M Scheme are in line with that allowed in CERC Regulations.

b) Regulation 18.2 specifies the nature/type of Capital Expenditure admissible after the cut-off date i.e Un-discharged/Deferred liabilities relating to works/services within the original scope of work, Liabilities to meet award of arbitration or for compliance of the order or decree of a court; On account of change of law etc. Accordingly, the Petitioner needs to furnish the relevant category/sub-regulation under which the schemes are proposed to be considered along with relevant documents.

- c) The Petitioner needs to give the justification, estimated life extension, improvement in performance parameters, cost-benefit analysis and reference price level for the proposed schemes."
- 1.3 EPPL vide reply dated 14.12.2022, clarified that it has wrongly mentioned few schemes/works under heading of "Renovation & Modernisation (R&M) of existing generation units/project and any other new measures to be initiated for Generation Business, e.g., automation, IT initiatives etc." with the request to consider the said schemes/works under the relevant sub-regulations (i.e. 18.2 & 18.6).
- 1.4 Public notice inviting suggestions/objections was published by the Petitioner in the newspapers on 09.12.2022. Thereafter, the petition was taken up for hearing as well as public hearing on 18.01.2023; however, nobody (except PSPCL) appeared in the public hearing. PSPCL sought time to file it objections/reply to the petition. The Commission vide Order dated 20.01.2023 observed/directed as under:

"The construction of Chute Spillway initially planned to be completed in FY 2018-19 (i.e. 1st MYT Control Period) has not yet started and the same is now being postponed to the 3 rd MYT Control Period. The Commission is of the view that its Justification needs to be analysed afresh and the Petitioner to explain why capex for the same is not disallowed. Further, in response to the query

raised by the Commission vide Interim Order dated 18.11.2022, the petitioner in its reply dated 14.12.2022 has submitted that the new schemes/works were wrongly mentioned under the R&M and requested to consider the same under different Regulation i.e. sub-Regulation 18.2. The Commission observes that the Regulation 18 falls under "General Principles for determination of ARR and Tariff" and pertains to Additional Capitalization of the Capex actually incurred subject to the prudence check and not the Capital Investment Plan (CIP). Moreover, the said Regulation cannot be read in isolation, it has to be read conjointly with the provisions of Regulation 9 specifically dealing with the Business Plan including CIP...

Petitioner to file the clarifications on the above issues PSPCL to file its objections/reply to the petition"

- **1.5** EPPL filed its response on 16.02.2023. PSPCL filed its reply to the petition on 28.03.2023 and EPPL filed rejoinder thereto vide letter dated 17.04.2023. After hearing the parties on 24.05.2023, the Order was reserved.
- **1.6** The Commission has examined the submissions made by EPPL, reply filed by PSPCL, rejoinder by EPPL and the other documents adduced on the record. The Commission analyses the EPPL's Business Plan including CIP in the following paras.

2. Business Plan for the Control Period of FY2023-24 to FY2025-26

2.1 EPPL's submission:

a) Capacity addition / reduction

The installed Capacity of the Project is 100 MW and with 15% overload it can generate 115 MW. There is no immediate plan for capacity addition/reduction of the Project.

b) Availability Forecast

The Power Plant will be available for generation during the Control Period as regular preventive maintenance of the Power Plant is being carried out. Sufficient mechanical, electrical & electronic spares are being procured from time to time, two sets of casted runners have been replaced with forged runners, up gradation of SCADA software system in the Power Plant & Substation, installation of new Excitation System and a team of efficient engineers & skilled workforce are operating the Power Plant. All efforts will be put together to achieve 100% Plant Availability Factor during the MYT Control period i.e., 2023-24 to 2025-26.

c) Future Performance Targets

The approved annual design energy of the Project is 403.27 MU after considering the mandatory discharge as per PSERC Order dated 4.12.2014. Also, as per provisions of the Implementation Agreement (IA), EPPL is required to supply free power to GoHP @12% of the generation for up to 12 years from the COD of the Project and @18% from the 13th year till 40th years. However, the project has been facing shortfall in energy generation since commissioning i.e., FY 2012-13 due to low discharge in Malana Khad. Therefore, the Petitioner has approached the PSERC through Petition No. 43 of 2021, whereon, vide interim-Order dated 15.11.2021, EPPL was allowed to approach Central Electricity Authority (CEA) for review of the Design Energy in accordance with the Regulation 31(6) of the CERC (Terms and Conditions of Tariff) Regulations, 2014. Further, Greenko has acquired EPPL (Mallana-

II) in Sept., 2021 and has conducted the hydrology study by utilizing services of Aquagreen Engineering Management Pvt. Ltd. (AQUAGREEN) to review the water flow study. This study has also indicated the low discharge from Malana Khad. Accordingly, EPPL has approached CEA for review of Design Energy of 100 MW Malana-II HEP and is revising its target of Annual Gross Generation to 329.43 MUs during the control period FY 2023-24 to 2025-26 as determined by the studies conducted by AQUAGREEN.

d) Proposed efficiency improvement measures

The efficiency of the Generating Units has improved after two sets of new forged runners are replaced in place of existing casted runners. We are also proposing to upgrade Nozzles & Deflectors for improving the efficiency of the plant. In addition, the manpower deployed in the Power Plant for Operation & Maintenance is being trained regularly and the efficiency of all appurtenant machines and tools has been further optimized. All measures are implemented to maintain the highest efficiency of the Power Plant.

e) R&M of existing generation units/project and any other new measures to be initiated for the Generation Business, e.g., automation, IT initiatives etc.

EPPL, initially in Petition, submitted that the Renovation & Modernization activities include procurement of Local Public Address system, Installation of Early Warning System, Walkie-Talkie communication equipment, Furniture, Emergency Vehicle for mobility, installation of Cladding sheets in Power House, protection measures of office building, Standby DG set, Firefighting pipe line, Vapour absorbing devices, Hydraulic & Manual bypass valves, Hydraulic & Manual brake jet valves, Mouth Rings, Nozzle tips & Clamping Rings, Radial gate Cylinder, Excitation & Governor Panels, cleaning and tightening of electrical equipment, which are proposed to be carried out in the ensuing Control Period for smooth operation of the Power Plant.

However, on being directed that as per the provisions of PSERC Regulations it needs to show that, the schemes proposed under Renovation & Modernization are in line with that allowed in CERC Regulations and also it needs to give the justification, estimated life extension, improvement in performance parameters, cost-benefit analysis and reference price level for the proposed schemes. EPPL, vide letter dated 14.12.2022, has clarified that it has wrongly mentioned these schemes/works under the heading of "Renovation & Modernization.

2.2 **PSPCL's comments:**

It is relevant to mention that the Petitioner has filed the present Petition under the MYT Regulations 2019 which are in fact applicable to the previous control period. The present Petition ought to have been filed under the PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2022.

2.3 Commission's Analysis:

The Commission agrees with PSPCL that the 3rd MYT Control Period of FY 2023-24 to FY 2025-26 is to be regulated as per the provisions of the PSERC (Terms and Conditions for Determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2022 notified on 27th October, 2022. A reference of the same was also made in the Commission's Order dated 18.11.2022, while admitting the Petition. As the same was notified after filing of the instant Petition and since the provisions with regards to the Business Plan including the CIP are similar in both the Regulations, the Commission proceeded to consider the Plan submitted by the Petitioner.

The Commission observes that, as per EPPL's submission, there is no immediate plan for any "Capacity addition/reduction" or "Renovation & Modernisation of the generation units/project and any other new measures to be initiated for Generation Business, e.g., automation, IT initiatives etc". Also, except for the submission that the manpower deployed is being trained regularly, it is silent on the issue of "Man Power Plan" implying no change in the same. On the issue of "Proposed efficiency improvement measures", though EPPL has submitted that it is proposing to upgrade Nozzles & Deflectors for improving the efficiency of the plant, however, no impact of same has been indicated while projecting the generation from the project. On the contrary, EPPL has projected lower Availability forecasts/ Future performance targets citing the issue of lower discharge.

Further, on the issue of change in the design energy, the Commission observes that the same is being considered in a separate Petition No. 43 of 2021 filed by EPPL with respect to its dispute with PSPCL on the issue of shortfall energy charges.

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3. Capital Investment Plan (CIP)

The petitioner has submitted the CIP as under:

3.1 Ongoing schemes of the previous MYT Control Period

Under the ongoing schemes of the previous MYT Control Period, EPPL has submitted the following schemes for approval of the CIP, with the common plea that prevalence of COVID-19 across the world has hindered completion of these works during the period as mobilization of manpower was difficult. Also, during Monson season project roads got damaged due to Heavy rains hampering movement of heavy machinery:

	Oligonity schemes of the prev	ious contro	I I EIIUU	(11.5. 01.)	
S. No.	Head	FY 2023-24	FY 2024-25	FY 2025-26	Total
1.	Construction of Chute Spillway	5.00	5.00	5.00	15.00
2.	Construction of New Bridge	0.65	- I -		0.65
3.	Black topping of approach roads and procurement of snow cleaning equipment, earth moving equipment etc.	0.97	0.96	7 -V	1.93
10	TOTAL	6.62	5.96	5.00	17.58

Ongoing schemes of the previous Control Period (Rs. Cr.)

The Commission examines the same as under:

3.1.1 Construction of Chute Spillway

3.1.1.1 EPPL's submission:

As per the Order dated 18.09.2020, the Commission had allowed an amount of Rs. 15.00 Cr. in FY 2021-22 towards construction of the Chute Spillway. EPPL intends to take up this work with an estimated cost of Rs. 15.00 Cr. during the ensuing control period i.e., FY 2023–24 to FY 2025–26 and prays the Commission to allow the

claim of the expenditure incurred under this head as and when the same is actually incurred.

3.1.1.2 PSPCL's comments:

The Petitioner has been canvassing the need for chute spillway as far back as 2016. In the Petition for approval of CIP for the 1st MYT Control Period from FY 2017-18 to 2019-20, it was submitted that the expenses for construction of chute spillway was expected to be capitalised in FY 2018-19. Thereafter the Petitioner, in the capital investment plan filed for the 2nd MYT Control Period of FY 2020-21 to FY 2022-23, sought extension for same with the submission that due to the climatic conditions it was unable to undertake the construction. Having failed in construction of chute spillway in the 1st as well as 2nd MYT Control Period, the Petitioner is now again seeking the expenditure towards the same in the 3rd MYT Control Period. Only reasons given by the Petitioner for the continuous delay in construction of the chute spillway are prevalence of Covid-19 and heavy rains during monsoon season.

In response to the Commission's Order dated 20.01.2023 seeking an explanation for the delay, the Petitioner by way of additional information has reiterated the earlier reasons (of prevalence of Covid-19 and heavy rains during monsoon season) and cited the vague reasons of winter season and land slide. If the case of the Petitioner is taken to be true, then it will not be able to undertake the construction of chute spillway even in the future since the geographical location of its plant is such that it will always be affected by the vagaries of nature. It is submitted that even if the expenditure is to be again allowed, no cost escalation shall be allowed to the Petitioner if and when the said expenditure is actually incurred in the future. This is without prejudice to the submissions of PSPCL that the expenditure is ought not to be allowed.

3.1.1.3 Commission's Analysis

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The Commission vide Order dated 20.01.2023, while observing that the construction of Chute Spillway initially planned to be completed in FY 2018-19 (i.e. 1st MYT Control Period) has not yet started, has expressed the view that its Justification needs to be analyzed afresh and the Petitioner needs to explain why capex for the same is not disallowed. In response to thereof, EPPL has submitted the reply on 16.02.2023, stating as under:

Malana II Hydroelectric Project is located in the Lesser Himalayan Belt, extending from EL. 2545m to EL. 1908m. The Lesser Himalayan Belt is classified as a high seismic Zone (Zone-V) prone to heavy rain fall & cloud bursts frequently during monsoon. Occurrence of flash flood / flood, slope failure / landslides is common along the rugged Himalayan terrain. Sometimes artificial lakes are formed due to blockage of the river course by a huge landslide, creating emergency situations along downstream areas.

The concrete diversion dam of Malana – II HE Project comprises nine Non-Overflow (NOF) and one overflow block (Block No.-5) for passing floods.

.... Two spillway bays of size 4.00m (W) X 5.50m (H) controlled by radial gates have been provided.

The discharging capacity of both the bays is around 759.24 m3/s, which is more than the PMF of 650.00 m3/s. It is prudent to mention here is that Project till date has witnessed maximum flood less than 100 m3/s till date. The Project has been declared under Commercial Operation on 12.07.2012 and is operating successfully since then. As highlighted earlier, the Project consist of two spillway bays, which were approved by HPSEB who was approving authority at that time (now Directorate of Energy (DoE), Government of Himachal Pradesh is approving authority).

On 24th August 2013, Malana-II dam was overtopped due to the malfunctioning of 2 Nos radial gates. Further, an Expert Committee constituted by Directorate of Energy (DoE), Government of Himachal Pradesh suggested for enhancement of the spillway capacity of 100 MW Malana II HEP by providing additional overflow chute spillway besides existing two spillways in the existing dam for safe passage of water in case of malfunctioning of gates during sudden high flood conditions.

EPPL intends to provide an ungated Surface Spillway as an additional safety feature in the Concrete Gravity Dam as per the directives and approval of the Department of Energy (DOE), Govt. of Himachal Pradesh, in line with the thrust given by the Central Water Commission, Govt. of India for safe and smooth operation of all Hydro Electric Projects in view of the changing weather conditions & frequent incidents of excessive floods / cloud bursts in the upper catchment areas of the Himalayan Belt witnessed frequently in past 4-5 years duration.

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On 06th Dec 2022, a communication letter received from Directorate of Energy, Himachal Pradesh and informing that 1st meeting of the state

committee on the Dam safety held under the chairmanship of the Chief engineer (Energy)-cum-Chairman State Committee on Dam safety, Himachal Pradesh (SCDS-HP) on 18th Nov 2022 in the Directorate of energy, Shimla. In that meeting, the construction additional Chute spillway was discussed, and the status was enquired with EPPL by SCDS. EPPL has informed that the work will be started in Sept 2023 after completion road repair works.

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In normal circumstances, Malana Khad does not carry much silt load. However, during last 10 years, a number of cloud bursts were recorded between Dam Complex and Powerhouse areas and are being recorded frequently all along the Himalayan Belt. In the event of heavy downpour/cloud bursts upstream of the Dam, large volume of water loaded with huge sand/silt/boulders may be transported and dumped in the reservoir of Malana II HEP within short duration. Similar events were recorded & encountered in Vishnu Prayag HEP & Srinagar HEP located in Uttarakhand in recent past when all gates provided got choked, which led to overtopping of barrage/dam.

Such unforeseen events occurring suddenly and dumping of large volume of water laden with sediments and bed load were not foreseen and considered during the conceptualization and design approval of any Hydro projects located along the Himalayan Ranges. Therefore, considering adverse geological conditions in the catchment area located upstream of Malana – II Dam, sudden large influx of sediment laden water resulted due to cloud burst may fill 350m long reservoir and also lead to choking of the two numbers of radial gates provided (with sill level at EL. 2514.0m) to release the maximum design flood (650Cumecs).

An un-gated Spillway as an additional safety measure as per the guidelines of DOE and approval accorded by the Hon'ble PSERC will be provided with its sill level just above the FRL (2543.00m) that is about 29.00m above the sill level of existing radial gates. It will allow the water to pass safely in such unforeseen event and the safety of a 45m high dam (from riverbed) will be ensured.

Since commissioning of the project, we had noticed only maximum 100 cumecs water and same has been released through existing radial gates. But last year, we had noticed a cloud burst incident nearby our powerhouse and resulted the several damages of our project road. The adverse change in climate and consequential effect on small catchment like Malana-II HE Project, there may be chances to face cloud bust scenarios at upstream of our Dam.

Accordingly, petitioner request the Hon'ble Commission to allow the chute Spillway work with an estimated cost of INR 15.00 Cr. in ensuing period as directions for the commencement of the same has been issued by the Department of Energy (DOE), Govt. of Himachal Pradesh considering an additional safety feature required in the concrete DAM."

The Commission observes that:

(i) Project's location being in the Lesser Himalayan Belt, classified as a high seismic Zone (Zone-V), prone to heavy rain fall & cloud bursts frequently during the monsoon was a well known fact even before seeking approval and construction of this generation project. Its design is expected to take care of such eventualities which are common in this region. The same is also evident from EPPL's submission that the discharging capacity of both the bays is around 759.24 m3/s, which is more than the PMF of 650.00 m3/s. Also the Project has witnessed a maximum flood volume of less than 100 m3/s till date.

- (ii) The provision of capital expenditure for a chute spillway is being allowed since the previous two MYT Control periods i.e. from FY 2018-19 to FY 2022-23. However, EPPL has not even started its construction yet and has been putting forth various excuses. The underlying position seems to be that the project designed with two radial gate spillways having a discharge capacity of more than the PMF of 650 m3/s has completed around 11 years of successful operation. Till date, as per its own admission, it has witnessed a maximum flood of even less than 100 m3/s.
- (iii) Also, advise letter(s) by the Department of Energy (DOE), GoHP cannot be construed as an Order or Decree of a court. Moreover, perusal of recommendations of DoE cited by the petitioner reveals that the same were based on a possible incidence of overtopping due to blockage or non-opening the Radial gates if they get stuck in the silt. Such an eventuality can be safely prevented by periodical flushing/ trial operation of gates as a routine O&M activity.

In view of the above, the Commission does not consider it to be exigent or prudent to keep on allowing expenditure to the tune of Rs. 15 Crore for construction of an additional spillway under the additional capitalization for the project, even after about 11 years of its successful operation. Preventing any unwarranted incidence of overtopping due to sticking of the radial gates of the already existing two spillways is a maintenance obligation of EPPL. EPPL is thus directed to ensure preventive maintenance activity as required and deemed prudent by flushing/ trial operations of the radial gates as a routine practice.

3.1.2 Construction of new Bridge/Culvert on ADIT-II/ADIT-I Nallahs

3.1.2.1 EPPL's submission:

EPPL has incurred an expenditure of Rs. 0.44 Crores, so far, out of the approved Rs. 1.05 Crores vide the Commission's Order dated 18.09.2020 for the period between FY 2020–21 to FY 2022-23 towards Construction of New Bridge/culvert. EPPL requests the Commission to allow it to complete these works with an estimated cost of Rs. 0.65 Crores during the ensuing control period i.e., FY 2023–24 and allow claim of the expenditure incurred under this head as and when the same is actually incurred.

3.1.2.2 PSPCL's comments:

The Petitioner has given the same vague reasons of Covid-19 and monsoon season for not being able to incur the complete expenditure. This is misconceived. It is submitted that no cost escalation ought to be allowed to the Petitioner if and when the said expenditure is actually incurred by the Petitioner.

3.1.2.3 Commission's Analysis:

The Commission observes that vide Order dated 18.09.2020 in Petition no. 02 of 2020, a provision of Rs. 1.05 Crore was allowed towards Construction of culvert/New Bridge as under:

"Considering the submissions above, the Commission observes that construction of a new bridge at ADIT-II and culvert at ADIT-I Nullahs on the approach road from the project towards dam complex is required for the operation of the plant. As such, the said expenditure of Rs.1.05 crore is allowed which shall be considered on merits after prudence check by the Commission in the True-up petition when claimed by EPPL with full justification along with vouchers/bills and audited accounts."

The Commission notes that an expenditure of Rs. 0.44 Crore has already been incurred by EPPL under this head out of the total provision of Rs. 1.05 Crore. However, the Commission agree with PSPCL that no cost escalation ought to be allowed to the Petitioner for delay on it part. Accordingly, the Commission allows only the remaining provision of Rs. 0.61 Crore (in place of Rs. 0.65 Crore demanded by EPPL) to be incurred in FY 2023-24, subject to the prudence check by the Commission in the True-up petition when claimed by EPPL with full justification along with vouchers/bills and audited accounts.

3.1.3 Communications (Black toping of approach roads and procurement of snow cleaning equipment, earth moving equipment etc.,)

3.1.3.1 EPPL's submission:

As per the Order dated 30.07.2018 and 03.09.2019, the Commission had approved the provision amounting to Rs. 3.85 Crore under the

head "Communications' and vide Order dated 18.09.2020, the Commission has provisionally allowed an amount of Rs. 1.50 Crore for period between FY 2020-21 to FY 2022-23 towards black topping of approach roads. Expenditure of Rs. 0.52 Cr, Rs. 0.49 Cr and Rs. 0.91 Cr incurred in FY 2017-18, FY 2018-19 and FY 2019-20 respectively has been already trued up, which leaves a balance of Rs. 1.93 Cr. EPPL requests the Commission to allow it to undertake these works during the ensuing control period and allow the claim of the expenditure incurred under this head to the tune of balance amount of Rs.1.93 Crores as and when the same is actually incurred.

3.1.3.2 PSPCL's comments:

It is submitted that the Petitioner has been delaying the expenditure as allowed by it and as such no cost escalation be allowed to the Petitioner on account of time overrun.

3.1.3.3 Commission's Analysis

The Commission observes that, vide Order dated 30.07.2018 in Petition 24 of 2017 filed for approval of CIP for the 1st MYT Control Period of FY 2017-18 to FY 2019-20, an amount of Rs. 3.8545 Crore was provisioned for Communication (construction of roads, bridges and ropeways) under the approved deferred provisions, with the observation that no additional capital expenditure will be allowed on account of deferred provisions beyond FY 2019-20. As such, EPPL's plea of covid outbreak, which started only in last week of March-2020, does not carry any weight. Thereafter, neither any provision was asked for nor provided by the Commission in the Business Plan including Capital investment plan for the 2nd MYT Control Period of FY 2020-21 to FY 2022-23 approved in Petition No. 02 of 2020.

Accordingly, the balance, if any, provisioned under the deferred provisions up to March, 2020 (in place of cut-off date of March, 2015; COD being 12.07.2012) has lapsed and no further extension is permissible.

3.2 New Schemes proposed under additional capitalization for the Control Period of FY 2023-24 to FY 2025-26:

3.2.1 EPPL's submissions:

- a) EPPL, in the petition, has proposed 23 new schemes/works to be taken-up during the Control Period of FY 2023-24 to FY 2025-26, with the request to allow claiming the expenditure incurred under as and when the same is actually incurred.
- b) Subsequently, in response to the observation by the Commission that since no change is indicated in the Capacity of the project, as per the provisions of Regulation 9.9, EPPL needs to show that the proposed Renovation & Modernization Schemes are in line with that allowed in CERC Regulations, and it also needs to give the justification, estimated life extension, improvement in performance parameters, cost-benefit analysis and reference price level for the proposed schemes. EPPL vide its reply dated 14.12.2022, submitted as under:

".....it has wrongly mentioned few schemes/works to be taken up over the MYT Control Period i.e. 2023-24 to FY 2025-26, under heading of "Renovation & Modernisation (R&M) of existing generation units/project and any other new measures to be initiated for Generation Business, e.g., automation, IT initiatives etc.", in para 2.5 of Petition 54 of 2022.

Petitioner requests the Hon'ble Commission to consider the schemes/works to be taken-up over the MYT Control Period i.e. 2023-24 to FY 2025-26, as proposed in para 2.5 of the Petition, under the following relevant category/subregulation of the Punjab State Electricity Regulatory Commission (Terms & Conditions for Determination of Generation, Transmission, Wheeling & Retail Supply Tariff Regulations, 2019.."

c) Thereafter, in response to the observations made by the Commission in Order dated 20.01.2023, EPPL vide letter dated 16.02.2023 while submitting its reasons for construction of the Chute Spillway (which has been dealt in the relevant section) also submitted its interpretation for submitting the proposal for new schemes under Regulation 18.2 as under:

"Petitioner submits that as per the CERC Tariff Regulations, 2019, a generating company, do not need to file separate petition related to approval of Business Plan and Capital Investment Plan before the start of new Control Period. The Regulation 26 of the CERC Tariff Regulations, 2019, deals with the additional capitalization beyond the original scope.

Hon'ble PSERC has similar regulation i.e. Regulation 18.2 of the PSERC MYT Regulations, 2022, which deals with the capital expenditure incurred after the cut-off date.

Considering the above, Petitioner requests the Hon'ble Commission to allow the various additional capital expenditure, projected to be incurred, under various sub heads of regulation 18.2 of Hon'ble PSERC MYT Regulation

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2022. The Petitioner also submits that such proposed capital expenditure will not claim under repairs and maintenance under O&M expenses.

The Petitioner further submits that the regulation 9.3 (e) of PSERC MYT Regulations, 2022 allows generating company to plan for capital expenditure for any new measures / initiatives for the generation business e.g.; automation, IT initiatives etc..

Considering the regulatory practices being followed by the Hon'ble CERC as mentioned above and enabling Regulations of the CERC Tariff Regulations, 2019 and PSERC MYT Regulations, 2022, the Petitioner humbly request the Hon'ble PSERC to allow schemes/works to be taken up over the MYT Control Period 2023-24 to 2025-26 as stated in the Petition as well as same is annexed herewith.."

d) New schemes proposed by EPPL in the 3rd MYT Control Period i.e.,
FY 2023-24 to FY 2025-26 are as under.

1	ADDITIONAL CAPITALIZATION	(An	nount in F	Rs. Cr.)		
S. No.	Head	Regu 18.	FY 2023-24	FY 2024-25	FY 2025-26	Total
1.	DG, Standby, 160 KVA	2(d) &9.3(e)	0.15	-	2	0.15
2.	Local Public Address (PA) System	2(b)	0.10	1-1	2-1	0.10
3.	Procurement & Installation of Early warning System	&9.3(e)	0.10	6-0	-	0.10
4.	Procurement of Walkie-Talkie Communication equipment	2(d)	0.15			0.15
5.	Replacement of Firefighting Pipeline	6	0.30	0./	-	0.30
6.	Protection measures of Office building	2(d)	0.30	-	-	0.30
7.	Proc. for replacement of ambulance	10	0.20	-	-	0.20
8.	Proc. for replacement of Furniture		0.20	-	-	0.20
9.	Proc. for replacement of Vapour absorbing devices		0.05	-	-	0.05
10.	Proc. for replacement of Hydraulic Bypass Valves		0.10	-	-	0.10
11.	Proc. for replacement of Manual Bypass Valves		0.04	-	-	0.04
12.	Proc. for replacement of Hydraulic Brake jet Valves		0.06	-	-	0.06
13.	Proc. for replacement of Manual Brake jet Valves		0.03	-	-	0.03

New Schemes proposed to be taken up in the 3rd MYT Control Period

	ADDITIONAL CAPITALIZATION	(An	nount in R	ls. Cr.)		
S. No.	Head	Regu 18.	FY 2023-24	FY 2024-25	FY 2025-26	Total
14.	Proc. for replacement of Mouth rings, Nozzle tips & Clamping rings	2(d) &(e)	0.30	0.30	0.30	0.90
15.	Refurbishment of Pelton runner	2(d)	0.60	0.60	-	1.20
16.	Proc. for replacement/spare Excitation panel in U#1	6	0.50	-	-	0.50
17.	Replacement of Governor panels in both units including common CW system, MIV control system	2(d)	2.10		-	2.10
18.	Proc. of workshop machinery and establish workshop shed	2(d)	1	0.15	0.15	0.30
19.	Replacement of SCADA system Hardware	6	- 7	1.50	-	1.50
20.	Upgradation of Nozzles & Deflectors	6	-		1.50	1.50
21.	Procurement of spare Radial gate Cylinder	2(d)	_	-	0.25	0.25
22.	installation of Cladding sheets in Powerhouse	2(d)	-	-	0.08	0.08
23.	New Emergency vehicle for mobility	2(d)	-	A	0.15	0.15
	TOTAL	(Adad	5.28	2.55	2.43	10.26

New Schemes proposed to be taken up in the 3rd MYT Control Period

3.2.2 PSPCL's Comments:

- a) The approval of business plan including capital investment plan can only be sought for in terms of Regulation 9 of the MYT Regulations, 2022. Unlike a petition for fixing/determining annual fixed cost, a petition seeking business plan including capital investment plan is limited in scope.
- b) Regulation 9.3 of the MYT Regulations, 2022 clearly states that business plan for business generation shall contain:
 - (i) Capacity addition/reduction;
 - (ii) Availability forecasts;
 - (iii) Future performance targets;
 - (iv) Proposed efficiency improvement measures;
 - (v) R&M of existing generation units/projects and any other new measures to be initiated for the generation business;

- (vi) Capital investment plan based on (i) (v), and
- (vii) Man power plan.

Therefore, in terms of Regulation 9.3 of the MYT Regulations, 2022, capital investment plan can only be based on limited parameters. It is the case of the Petitioner that it has no plan for any capacity addition or reduction of its project. As admitted by the Petitioner by way of additional information as filed by the Petitioner on 14.12.2022, it is also not his case that the present Petition is being filed seeking renovation and modernisation of its project.

- c) Further, as per Regulation 9.7 of the MYT Regulations, 2022; the capital investment plan is to be submitted in two (2) parts, namely for ongoing schemes for the previous MYT control period and for schemes to be taken up during the following MYT control period. It is submitted that Regulation 9.7 has to be read conjointly with Regulation 9.3 which is to say that the schemes as mentioned in Regulation 9.7 have to be for the activities/forecasts/targets as mentioned in Regulation 9.3. It is reiterated that nowhere in the present Petition has the Petitioner made out a case that the schemes sought to be implemented by it are covered under Regulation 9.3.
- d) Further, in terms of Regulation 9.9 of the MYT Regulations, 2022, capital investment plan for generation business (such as the Petitioner) shall match with 'capacity addition' during the control period and 'renovation and modernization' of the generating plant in terms of CERC Regulations. As mentioned above, the Petitioner by way of additional information dated 14.12.2022 has admitted that it

is not making any claims towards 'renovation and modernization' and also that it has no plans for 'capacity addition/reduction'.

- e) In view thereof, the present Petition does not pass the threshold of Regulation 9 for approval of business plan including capital investment plan.
- f) By way of the additional information dated 14.12.2022, the Petitioner has sought to make its claim under Regulation 18.2 of the MYT Regulations, 2022. It is submitted that the said Regulations are not applicable in the context of approval of business plan including capital investment plan:
 - (i) Regulation 18 falls under general principles of determination of ARR and tariff, and as such cannot be invoked in the present Petition. It is stated that Regulation 18.2 deals particularly with additional capitalisation actually incurred after the cut-off date subject to prudence check.
 - (ii) In response to the queries raised by the Commission on the issue of applicability of Regulation 18.2 of the PSERC Regulations, the Petitioner has sought to draw a parallel with Regulation 26 of the CERC Tariff Regulations, 2019 to contend that the Central Commission has allowed additional capitalization through various orders for hydro generating plants. This is misconceived. The CERC tariff regulations are applicable to tariff proceedings whereas the present Petition filed by the Petitioner falls under a different subject matter i.e., business plan including capital investment plan.

- (iii) Vide additional information dated 16.02.2023, the Petitioner has sought to propose that the capital expenditure will not be claimed under O&M expenses. This is also misconceived. Without prejudice to the submissions of PSPCL that the claims being sought for by the Petitioner under Regulation 18.2 of the MYT Regulations, 2022 cannot be sought for in any manner within the scope of the present Petition. It is stated that the expenses being sought by the Petitioner can be claimed, if at all, under O&M expenses and not as additional capitalisation.
- (iv) In the additional information dated 14.12.2022, the Petitioner had categorically submitted that it had wrongly mentioned few schemes to be taken under the heading of Renovation & Modernisation. However, in the information filed subsequently on 16.02.2023, the Petitioner has submitted that in Regulation 9.3 (e) of the MYT Regulations, 2022, it is seeking capital expenditure under the same head.
- (v) In view thereof, it is submitted that the present Petition fails to pass the muster of Regulation 9 of the MYT Regulations, 2022 and that the claims being made are not maintainable under Regulation 18.2 of the said Regulation.
- g) Further, it is submitted that:
 - (i) The items at Sr. Nos. 1 to 15 claimed by the Petitioner are basic equipment of a hydro generating station. No extra procurement of the items ought to be allowed by the Commission at this belated stage.

- (ii) Items which have been claimed citing requirement of the same towards efficient and successful operation of the plant ought not to be allowed since O&M costs of the plant should be enough towards the same.
- (iii) It is stated that since the schemes/works as claimed by the Petitioner ought to have been available with it, the Commission may direct the Petitioner to confirm by way of an affidavit that the items being sought for were already not available with them since COD.
- (iv) Any upgradation or refurbishment should be a part O&M activity and not allowed under any other head. It is reiterated that any replacement of equipment should be strictly in terms of the O&M activity.
- (v) Almost all the claims made by the Petitioner from Sr. Nos. 1 to 23 have been claimed under Regulation 18.2 (d). It is submitted that none of the items being sought for by the Petitioner qualifies the criteria of being necessary for efficient and successful operation of the project, especially incurred after the cut-off date.

3.2.3 Commission's Analysis:

The Commission notes that:

a) The Petitioner has filed the petition with the prayer to condone the delay and admit the Petition for seeking approval of Business Plan including Capital Investment Plan in accordance with Regulation 9.

- b) Subsequently, pursuant to the observations made by the Commission in Order dated 18.11.2022 that the as per the provisions of Regulation 9.9 it needs to show that the Schemes proposed under Renovation & Modernization are in line with that allowed in CERC Regulations, and it also needs to give the justification, estimated life extension, improvement in performance parameters, cost-benefit analysis and reference price level for the proposed schemes. EPPL vide reply dated 14.12.2022, submitted that it has wrongly mentioned a few schemes/works under heading of "Renovation & Modernization (R&M) of the existing generation units/project and any other new measures to be initiated for Generation Business, e.g., automation, IT initiatives etc." and requested the Commission to consider the same under subregulations 18.2 and 18.6 of PSERCs MYT Regulations.
- c) Thereafter, in the subsequent submissions dated 16.02.2023, the Petitioner, while reiterating the request to allow various additional capital expenditures projected to be incurred under various sub heads of sub-regulation 18.2, further submitted that the regulation 9.3 (e) of PSERC MYT Regulations, 2022 allows a generating company to plan for capital expenditure for any new measures to be initiated for the Generation Business, e.g.; automation, IT initiatives etc.

The Commission observes that the Petitioner doesn't seem to be aware of the applicable Regulations in the matter. Also, EPPL's plea for consideration of its schemes under the CERC Regulations is not tenable as the Commission is bound by its own Regulations. The Commission agrees with PSPCL that the extant PSERC MYT Regulations, 2022 mandates submission of Business Plan including the CIP as per the provisions specified in Regulation 9 of the same. As specified in sub-Regulation 9.9, the capital investment plan for generation business shall match with 'capacity addition during the control period' and/or 'renovation and modernization of the generating plant in terms of CERC Regulations'. Further, in Part IV (General Principles for Determination of Common Elements of ARR and Tariff) of the Regulations, the provision of Additional Capitalization under sub-Regulation 18.2 is an enabling provision for consideration of the Capital Expenditure actually incurred in the event of exigencies as specified therein and sub-Regulation 18.6 is procedural in nature.

Accordingly, the Commission analyses the new schemes proposed by EPPL as under:

3.2.3.1	Schemes	proposed	under	sub-Regulation	9.3(e) &	18.2(b):
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S.	Sahama/Mark	Amount (Rs. Cr)					
No.	Scheme/Work	FY 2023-24	FY 2024-25	FY 2025-26	Total		
1.	Local Public Address system.	0.10	-	12	0.10		
2.	Installation of Early Warning system.	0.10	- /	1501	0.10		
1	Sub-Total	0.20	18	3-1	0.20		

EPPL's submission

EPPL has submitted that, as per the instructions of Central Electricity Authority (CEA), installation of Local Public Address (PA) System and Early Warning System (EWS) are mandatory for Hydro Power stations and Dams. To fulfill the said compliance, EPPL

proposes to purchase PA system and EWS system with an estimated cost of Rs. 10 Lac each to be incurred in FY 2023-24.

PSPCL's comments

PSPCL's contention is that CEA letter annexed by EPPL is only for vulnerable hydro projects. Also, EPPL has not enclosed the list of hydro projects mentioned in the letter. Even otherwise, claim towards PA system and early warning system cannot be allowed since instructions of CEA cannot be considered as 'an order or decree of a court'.

Commission's Analysis

The Commission observes that these works cannot be considered as automation and/or IT initiatives under the sub-Regulation 9.3(e). Further, with regard to sub-Regulation 18.2(b); the Commission notes that, CEA letter dated 02.08.2021 cited by EPPL, reads as under:

"...It was desired by Secretary (Power) during the meeting that all the 'vulnerable' under construction as well as in-operation hydro projects being implemented in upper reaches of Himalayan region should mandatorily have provision of an Early Warning System (EWS) in place.

Accordingly, action has already been initiated by CEA to issue necessary amendments in the Safety Regulations for mandatory provision of an Early Warning System (EWS) in all the "vulnerable" under construction as well as in operation hydro projects. Further, CEA has identified a number of such 'vulnerable' large hydro projects in operation and under construction (list enclosed at Annex-II & III)......" The Commission observes that, sub-Regulation 18.2(b), refers to the expenditure actually incurred to meet "Liabilities to meet award of arbitration or for compliance of the order or decree of a court". However, as is evident from the CEA's letter dated 02.08.2021, amendments in the Safety Regulations for mandatory provision of an Early Warning System (EWS) in the vulnerable hydro projects is yet to be issued. Further, in the said letter, although there is a mention of the 'list (of vulnerable projects) enclosed at Annex-II & III'; these were not appended by the Petitioner even after being pointed out by PSPCL.

In view of above and since the public address system for making announcements before release of water by the dam authorities is a standard practice, in case the equipment is not included in the original project cost, the same shall be considered, as and when the amendments in the Safety Regulations are notified after prudence check by the Commission in the True-up petition when claimed by EPPL with full justification along with vouchers/bills and audited accounts.

3.2.3.2 Schemes proposed under sub-Regulation No. 18.2(d) and/or 9.3(e)/18.2(e):

C			Amou	nt (Rs. Cr)
Sr. No.	Scheme/work	FY 2023-24	FY 2024-25	FY 2025-26	Total
1.	DG, Standby, 160 KVA	0.15	-	-	0.15
2.	Procurement of Walkie-Talkie Communication	0.15	-	-	0.15

C		unt (Rs. Cr	.)		
Sr. No.	Scheme/work	FY 2023-24	FY 2024-25	FY 2025-26	Total
	equipment				
3.	Protection measures of Office building	0.30	-	-	0.30
4.	Proc. for replacement of ambulance	0.20	-	-	0.20
5.	Proc. for replacement of Furniture	0.20	-	-	0.20
6.	Proc. for replacement of Vapour absorbing devices	0.05	-	-	0.05
7.	Proc. for replacement of Hydraulic Bypass Valves	0.10	1-	-	0.10
8.	Proc. for replacement of Manual Bypass Valves	0.04	0	-	0.04
9.	Proc. for replacement of Hydraulic Brake jet Valves	0.06	12	4	0.06
10.	Proc. for replacement of Manual Brake jet Valves	0.03		0	0.03
11.	Proc. for replacement of Mouth rings, Nozzle tips & Clamping rings	0.30	0.30	0.30	0.90
12.	Refurbishment of Pelton runner	0.60	0.60	1-2	1.20
13.	Replacement of Governor panels in both units including common CW system, MIV control system	2.10	/-\	INI	2.10
<mark>1</mark> 4.	Proc. of workshop machinery and establish workshop shed	1	0.15	0.15	0.30
<mark>1</mark> 5.	Procurement of spare Radial gate Cylinder	1-1	-	0.25	0.25
<u>16</u> .	installation of Cladding sheets in Powerhouse	/ - /	-	0.08	0.08
17.	New Emergency vehicle for mobility	A-	/-	0.15	0.15
	Sub-Total	4.28	1.05	0.93	6.26

EPPL's Submission

a) Purchase of Diesel Generator of 160 KVA for Standby

The old DG set is in operation since 2010 and its efficiency had reduced. It is the emergency source of the supply during 132 KV line break down for black start support. Malana-II HEP is underground powerhouse and continuous power supply is required to operate the auxiliaries. In case of failure of main DG set, no standby DG set is available. EPPL proposes to purchase a 160KVA DG set at an estimated cost of Rs. 15 Lac to be incurred in FY

2023-24 so that there is no hindrance in generation activity in case of breakdown or failure of the existing DG set.

b) Procurement of Walkie-Talkie Communication equipment

At present EPPL employees are using mobile communication in the project area. From last few years, the site team is facing difficulty in communication due to mobile signal issues. So, EPPL proposes to purchase Walkie-Talkie equipment with an estimated cost of Rs. 15 Lac to be incurred in FY 2023-24 for any emergency situations like power supply fail and security related issues.

c) Protection measures of Office building:

In front of the Plant's main administration office, Nallah is located and during sudden discharges in the rainy season the water from this nallah enters the Office complex. To avoid the damage to office complex and safety of employees, we need to strengthen the office building by constructing the wall for water diversion. EPPL proposes to undertake these activities at an estimated cost of Rs. 30 Lac during the FY 2023-24.

d) Ambulance:

Existing ambulance is 13 years old. The Plant is located far away from city and nearby PHC is located at 15 Km distance from our project. So, EPPL propose to purchase an ambulance with an estimated cost of Rs. 20 Lac to be incurred during the FY 2023-24 for any emergency situations.

e) Furniture:

Existing furniture is not in good condition as it is 12 years old. Keeping in mind the health & safety aspects of the employees, EPPL proposes to replace the damaged furniture with an estimated cost of Rs. 20 Lac to be incurred in the FY 2023-24.

f) Vapour absorbing devices:

Existing Vapour absorbing devices installed in thrust & guide bearings of the units are not working properly. The motor winding got burnt repeatedly. These devices are not repairable due to smaller size and also not efficient due to number of repairs. So, EPPL proposes to replace them with an estimated cost of Rs. 5 lac to be incurred in the FY 2023-24.

g) Hydraulic Bypass Valves, Manual Bypass Valves, Hydraulic Brake jet Valves and Manual Brake jet Valves

During the operation of these valves, the internal components get eroded due to presence of silt particles in water. Existing valves are internally leaking and maintenance activities of nozzle and turbine are not possible. EPPL proposes to replace them with an estimated cost of Rs. 10 Lac for Hydraulic Bypass valves, Rs. 4 Lac for Manual Bypass valves, Rs. 6 Lac for Hydraulic Brake jet valves and Rs. 3 Lac for Manual Brake jet valves respectively to be incurred in the FY 2023-24.

h) Replacement of Mouth rings, Nozzle tips & Clamping rings"

The project is a high head run of the river project situated very near to the glaciers and normally operates with high silt levels during high flow season. The silt particles while passing at high velocity in the high head turbine erode the turbine components/parts such as Turbine (Pelton) Runner, Nozzle parts covering Nozzle tips, nozzle mouth rings and Clamping rings etc. For avoiding any generation loss due to leakage of water, it is better to replace the Mouth rings, Nozzle tips and Clamping rings which are affected due to erosion. So, EPPL propose to purchase them with an estimated cost of Rs. 90 Lac to be incurred during the control period FY 2023-26.

i) Refurbishment of Pelton runner:

Refurbishment of Runners is necessary for efficient operation of the plant. So, EPPL propose to refurbish them with an estimated cost of Rs. 120 Lac to be incurred during FY 2023-24 & FY 2024-25.

j) Replacement of Governor panels in both units including common CW system, MIV control system:

The spare parts procured initially were exhausted and their procurement from OEM (China) was taking time. Also, existing hardware PLCs are not supporting with latest Windows software. Manufacturers have discontinued the products installed in the plant and the spares & service support is also not available. Therefore, EPPL proposes to indigenize them by replacing them with latest technology with an estimated cost of Rs. 210 Lac to be incurred in FY 2023-24.

k) New Workshop machinery and workshop shed:

The Project is located in remote area and there is no workshop close by. For any kind of repairs, the equipment is sent to workshop which is at least 100 km away. So, it is proposed to have a lathe machine, hydraulic press, bench drilling machine, etc., for repair of equipment at the plant premises to save the breakdown time. EPPL propose to purchase them and setup the workshop at an estimated cost of Rs. 30 Lac to be incurred during the FY 2024-26.

I) Radial gate Cylinder:

EPPL is having 2 nos. radial gates provided on spillway to control the flow and maintain reservoir level. During operation of the gates, it was noticed that the hydraulic cylinder piston rod got damaged. EPPL does not have any spare cylinder for the radial gates, so it propose to purchase them with an estimated cost of Rs. 25 Lac to be incurred during the FY 2025-26 for any emergency situations.

m)Cladding sheets in Powerhouse:

By cladding in powerhouse, the water leakages in powerhouse can be diverted. So, EPPL proposes to undertake it with an estimated cost of Rs. 8 Lac to be incurred in the FY 2025-26.

n) Emergency Vehicle:

The dam is located 15 km away from the powerhouse and it takes at least 1 hour to reach powerhouse. An emergency vehicle at dam is required for 24x7 for safe movement of the staff. EPPL propose to purchase a vehicle with an estimated cost of Rs. 15 Lac to be incurred during the FY 2025-26.

PSPCL's comments

The schemes/works as sought by EPPL cannot be allowed within the scope of the present petition. Further, none of the items being sought for by the Petitioner qualifies the criteria of being necessary for efficient and successful operation of the project, especially incurred after the cut-off date. No extra procurement of the items ought to be allowed by the Commission at this belated stage. O&M costs of the plant should be enough towards the same. Upgradation or refurbishment should be a part O&M activity and not allowed under any other head. Any replacement of equipments should be strictly in terms of the O&M activity.

Commission's Analysis

The Commission observes that the scheme for Stand by DG Set cannot be considered as automation and/or IT initiatives under the sub-Regulation 9.3(e). The sub-Regulation 18.2(d) and (e) refers to the expenditures actually incurred to meet any additional works/services which have become necessary for efficient and successful operation of the project but were not included in the original project cost or, on account of damage caused by natural calamities. Perusals of the submission made by the petitioner do not indicate that any of the schemes fulfil the said criteria for consideration under these sub-Regulations.

The Petitioner is proposing to procure spare/ capital spares (standby DG Set), T&P and Furniture, for which additional capital expenditure is not permissible after the cut-off date of the project. The Commission agrees with PSPCL that expenses for these items are required to be met from 'Repair & Maintenance' and 'A & G' expenses under the O&M costs already being allowed on normative basis for each year.. The Petitioner plea that these expenses shall not be claimed under the O&M is not a valid argument as the same is being determined/allowed separately on normative basis. Also, the proviso under sub-Regulation 18(2)(e) specifically provides that any expenditure on acquiring the minor items or the assets like tools

and tackles, furniture etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff.

In view of above, the Petitioners' request to allow the above expenses under this sub-Regulation is not admissible.

3.2.3.3 Schemes proposed under sub-Regulation 18.6:

S.	Scheme/work	Amount (Rs. Cr)					
No.		FY 2023-24	FY 2024-25	FY 2025-26	Total		
1.	Replacement of Firefighting Pipeline	0.30	- /	22-	0.30		
2.	Proc. for replacement/spare Excitation panel in U#1	0.50	-	6	0.50		
3.	Replacement of SCADA system Hardware		1.50		1.50		
4.	Upgradation of Nozzles & Deflectors		- 1	1.50	1.50		
Co	Sub-Total	0.80	1.50	1.50	3.80		

EPPL's Submissions

a) Replacement of Firefighting Pipeline:

Existing pipeline got damaged due to rust formation from inside over the years and are not adequate to hold water pressure, which may lead to any accidental damage. So, EPPL proposes to replace the pipeline with an estimated cost of Rs. 30 Lac to be incurred in FY 2023-24.

b) Excitation Panel of Unit-1:

Earlier, EPPL has purchased 2 excitation panels and replaced the excitation panel in Unit-2 and another panel is kept as a spare. Now it needs to procure the same for Unit-1 also because existing China make panels are not working properly. So, EPPL proposes to replace them at an estimated cost of Rs. 50 Lac to be incurred in the FY 2023-24.

c) Replacement of SCADA system Hardware:

Existing hardware PLCs are not supporting the latest Windows supported software. Manufacturers have discontinued the products installed in plant and the spares & support is also not available. So, EPPL proposes to replace them at an estimated cost of Rs. 150 Lac to be incurred in the FY 2024-25.

d) Up-gradation of Nozzles & Deflectors:

The project is a high head run of the river project situated very near to the glaciers and normally operates with high silt levels during high flow season. The silt particles while passing at high velocity in the high head turbine erode the turbine components/parts including the Nozzles and Deflectors. After detailed study it was observed that there are chances to increase plant efficiency approximately 3% by changing the nozzles and deflectors. So, EPPL proposes to upgrade them at an estimated cost of Rs. 150 Lac to be incurred during the FY 2025-26.

PSPCL's comments

Any up-gradation or refurbishment should be a part O&M activity and not allowed under any other head. It is relevant to note that on the one hand, EPPL is claiming that it has brought down the shut down time through repair activities, however, on the other hand, it has repeatedly stated that the equipments of the plant are leaking. Such contradictory submissions of EPPL ought to be disallowed and therefore, it is reiterated that any replacement of equipments should be strictly in terms of the O&M activity.

Commission's Analysis

The Commission observes that:

- (i) In normal course, with routine O & M practices under taken at regular intervals, Firefighting Pipelines are installed with the expectation to last for the lifetime of a plant. Any maintenance or replacement should be a part of normal O & M activity for which expenditure is normatively provisioned.
- (ii) EPPL is already having a spare excitation panel purchased against Unit # 2. Moreover, it is a capital spare and additional Capex for the same is not permissible after the cut-off period.
- (iii) Although EPPL has submitted that it is proposing to upgrade Nozzles & Deflectors for improving the efficiency of the plant, but no impact of same has been indicated while projecting the generation of the project. All wear and tear mentioned is also covered through the provision of R&M expenses.

The Commission also refers to sub-Regulation 18.6, under which the schemes have been proposed, which reads as under:

"Any expenditure on replacement of old assets or renovation and modernization or life extension shall be considered on normative debt-equity ratio specified in this Regulation after writing off the entire value of the original assets from the original capital cost of the asset replaced."

As is evident, this sub-Regulation is a procedural regulation, specifying the procedure/principle for consideration of the expenditure incurred on 'replacement of old assets' or 'Renovation and Modernization' or 'life extension' for the purpose of determination of elements of ARR and Tariff. The schemes/works

of Renovation and Modernization of the generating plants are required to be filed as per the provisions of Regulations 9.9 (a)(ii) read with 9.10, reproduced below:

"9.9 The capital investment plan shall match with:

(a) For Generation Business:

i) capacity addition during the Control Period;

ii) renovation and modernization of the generating plant as allowed in CERC Regulations;

9.10 In case of existing Generation and Transmission projects, the capital investment for Renovation and Modernization shall consist of a Detailed Project Report which will include the following elements:

- (a) Complete scope and justification;
- (b)Estimated life extension;
- (c) Improvement in performance parameters;
- (d)Cost-benefit analysis;
- (e) Phasing of expenditure;
- (f) Schedule of completion;
- (g) Reference price level;
- (h) Estimated completion cost including IDC etc.;
- (i) Other aspects."

In view of above, the Petitioners' request to allow the above expenses under sub-Regulation 18.6 is not admissible.

Accordingly, a summary of the expenditure provisioned/allowed by the Commission for the schemes/works to be carried out/capitalized in the 3rd MYT control period FY 2023-24 to FY 2025-26 is as under:

(Amount in Crore)

					,			
S.	Scheme/work	Provisioned/Allowed by the Commission						
No.	Scheme/work	FY 2023-24	FY 2024-25	FY 2025-26	Total			
Α.	Ongoing schemes of the previous MYT Control Period							
1	1. Construction of Bridge/Culvert	0.61	-	-	0.61			
В.	New Schemes to be taken up in this MYT Control Period	*	*	*	*			
	TOTAL	0.61	2-0	-	0.61			

* The capital expenditure for Early Warning system (EWS) shall be considered as per the Commissions observation made under Para 3.2.3.1 of the Order.

Petition is disposed of in light of the above analysis and observations of the Commission.

Sd/-

Sd/-

(Paramjeet Singh) Member (Viswajeet Khanna) Chairperson

Chandigarh Dated: **11.07.2023**