

**BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION
BAYS No. 33-36, SECTOR-4, PANCHKULA- 134112, HARYANA**

Case No. HERC/PETITION NO. – 38 of 2021

**Date of Hearing : 09.02.2022
Date of Order : 21 .02.2022**

IN THE MATTER OF:

Petition under Section 86(1)(a) & 86(1)(e) read with Section 61 & 62 of the Electricity Act, 2003 for seeking compensation/ tariff adjustment on account of “Policy on Reuse of Treated Waste Water” issued by Govt. of Haryana in line with Tariff Policy-2016 to mandated use of Sewerage treated water in Thermal plants under “Change in Law”.

Petitioner

Haryana Power Generation Corporation Ltd., Panchkula (HPGCL)

Respondent

Haryana Power Purchase Centre, Panchkula (HPPC)

Present on behalf of the Petitioner, through Video Conferencing

Shri Tabrez Malawat, Advocate

Present On behalf of the Respondent, through Video Conferencing

Smt. Sonia Madan, Advocate

Quorum

**Shri R.K. Pachnanda
Shri Naresh Sardana**

**Chairman
Member**

ORDER

Brief Background of the case

1. The present petition has been filed by HPGCL primarily seeking compensation/tariff adjustment on account of “Policy on Reuse of Treated Waste Water” issued by the Govt. of Haryana in line with the National Tariff Policy, 2016 to mandate the use of sewerage treated water in thermal plants under “Change in Law”.
2. Brief submissions of HPGCL are as under:
 - i) That the instant petition is for claiming the compensation/ tariff adjustment for HPGCL Units under “Change in law” due to enactment of new policy by the Govt. of Haryana vide gazette notification 5/18/2018-3PH, dated 30.10.2019 (clause 8.1.1.1), which mandate the use of Treated Waste Water (TWW) for Thermal Power Plants. The relevant clause is reproduced hereunder:-

“8. MANDATE OF USE OF TWW

.....

8.1 Non-Potable Use

8.2 8.1.1 Mandatory Use

8.1.1.1 Thermal Power Plants

As per notification of Ministry of Power (Government of India), under clause 6.2(5) of their Tariff Policy dated 28.01.2016 has stipulated that The Thermal Power Plants located within 50 Km radius of sewage treatment plant of Municipality / Local bodies/ similar organization shall in order of their closeness to the sewage treatment plant, mandatory use treated sewage water produce by these bodies and the associated cost on this account shall be allowed as a pass through in the tariff. Therefore, it shall be mandatory for all Thermal Power Plants within a 50 km radius of the STP or city limits to use TWW.
.....”

- ii) That the reference is further invited to clause 6.2 of National Tariff policy 2016, reproduced hereunder under:

“6.2 Tariff structuring and associated issues

.....

*(5) The thermal power plant(s) including the existing plants located within 50 km radius of sewage treatment plant of Municipality/local bodies/similar organization shall in the order of their closeness to the sewage treatment plant, mandatorily use treated sewage water produced by these bodies and the associated cost on this account be allowed as a pass through in the tariff. Such thermal plants may also ensure back-up source of water to meet their requirement in the event of shortage of supply by the sewage treatment plant. **The associated cost on this account shall be factored into the fixed cost so as not to disturb the merit order of such thermal plant.** The shutdown of the sewage treatment plant will be taken in consultation with the developer of the power plant.”*

- iii) That as per the HERC MYT Regulation, 2019 the “Change in Law” has been identified as under:-

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

- (a) enactment, bringing into effect or promulgation of any new Indian law; or*
- (b) adoption, amendment, modification, repeal or re-enactment of any existing Indian law; or*
- (c) change in interpretation or application of any Indian law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation or application; or*
- (d) change by any competent statutory authority in any condition or covenant of any consent or clearances or approval or licence available or obtained for the project; or*
- (e) coming into force or change in any bilateral or multilateral agreement or treaty between the Government of India and any other Sovereign Government having implication for the generating station or the transmission system regulated under these regulations.*

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

- iv) That under Regulation 18 of the HERC MYT Regulations, 2019 compensation for additional capitalization and capital expenditure in relation to the change in law events, has been allowed.
- v) That CERC has already identified the same as “Additional Capitalization beyond the original scope” under the Tariff Regulations 2019- 2024, as under:

“26. Additional Capitalization beyond the original scope

(1) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts beyond the original scope, may be admitted by the Commission, subject to prudence check:

- (a) Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Force Majeure events;*
- (d) Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;*
- (e) Deferred works relating to ash pond or ash handling system in additional to the original scope of work, on case to case basis
Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M) or repairs and maintenance under O&M expenses, the same shall not be claimed under this Regulation;*
- (f) Usage of water from sewage treatment plant in thermal generating station.”***

- vi) That CERC had further allowed considering the Auxiliary Consumption in its regulations for Sewage Treatment Plants separately as under:

“Auxiliary Energy Consumption' or 'AUX':

.....

Provided further that auxiliary energy consumption for compliance of revised emission standards, sewage treatment plant and external coal handling plant (jetty and associated infrastructure) shall be considered separately.”

- vii) That reference is further invited to the meeting of the State Level High Power Committee (SLHPC) held on 06.01.2020 under Chairpersonship of the worthy Chief Secretary, Government of Haryana, wherein it was decided as under:

“Worthy CS directed that work of laying of conveyance network and tertiary treatment plant will be carried out by Power Department at their own level. On this, ACS/Power intimated that their first priority would be to take up work of conveyance network and

tertiary treatment for Yamunanagar Power Plant. After its success, further possibilities would be explored for two other plants of Panipat and Hisar.”

- viii) That on perusal of the policy on Reuse of Treated waste water as notified by the Govt. of Haryana and National Tariff Policy, 2016, the said event falls under “Change in Law” for HPGCL units and may also be considered as directives under Section 107/108 of the Electricity Act,2003 in view of the policy notified by the Government of Haryana. The expenditure on this account are required to be compensated under fixed cost.
- ix) That the essence of the Change in Law provision is to restore the affected party to the same economic conditions as such event has not been happened. In this case, the petitioner herein also required to be placed in the same economic position as if such change in law has not occurred.
- x) That complying with the directives of the Government, HPGCL has initialed the phase wise implementation of the scheme for use of Tertiary Treatment Plant (TTP) water under its plants. In order to comply the directives of CS/Haryana, HPGCL has initiated the e-tender on 20.01.2020 for consultancy services for preparation of feasibility report, detailed project report, bidding documents etc. for installation of TTP project including related conveyance system for usage of the Sewage Treatment Plant (STP) related waste water at DCRTTP Yamunanagar.
- xi) That on 23.07.2020, the consultancy work was awarded to M/s Exceltech Consultancy and Projects Pvt Ltd, Jaipur. The consultant has submitted the final DPR on 16.07.2021. The same was apprised to WTDs, HPGCL in its meeting held on 16.08.2021. The detail of the competition period and expenditure to be incurred as per DPR is as under:
 - a) The proposed competition period of project is 18 months (including commissioning).
 - b) Proposed operation and maintenance period of project is 10 years extendable for another 5 years or till life of the power plant.
 - c) The estimated capital cost of the project is Rs 91.12 Cr and O&M Cost for 10 years (including power charges) would be Rs 110.59 Cr.
- xii) That HPGCL till date has incurred approximately Rs 16.50 lakh on the consultancy services.
- xiii) Following prayers have been made:-
 - a. Allow the present petition and grant in principle approval for incurring capital expenditure on usage of water from sewage treatment plant in terms of the Policy on Reuse of Treated Waste Water dated 30.10.2019 and clause 6.2 (5) of the Tariff Policy, 2016;
 - b. Consider Policy on Reuse of Treated Waste Water dated 30.10.2019, issued in line with the Tariff Policy-2016 as a “*Change in law*” event for all units of HPGCL and

- grant in principle approval for the compensation for the corresponding changes arising out of the same as pass through in the tariff of all units of HPGCL;
- c. Allow the expenditure incurred till date by HPGCL on consultancy services i.e. Rs 16.50 lakh as onetime expense and pass through the same in the tariff of the petitioner;
 - d. Frame the guidelines to book the expenditure arising out of the compliance of the Policy on Reuse of Treated Waste Water dated 30.10.2019 as a fixed cost without disturbing the merit order of such thermal plants as mandated under clause 6.2 (5) of the Tariff Policy, 2016;
 - e. Allow the auxiliary consumption for the Sewage Treatment Plant to be booked separately in such a way that it shall not disturb the position of HPGCL in MoD.
 - f. Approve the tentative cost as per DPR for DCRTPP Yamunanagar for installation and O&M expenses with the liberty to approach the Hon'ble Commission before the commencement of operation and also for seeking the approval of the actual amount of the same as pass through in the tariff;
 - g. In principle approval may be granted for proceeding for installation of said scheme for other HPGCL units i.e. PTPS/RGTPP after successful implementation of the same at DCRTPP as per the policy.
 - h. Pass any other order as deemed fit in the matter.
3. The respondent i.e. HPPC filed its reply, under affidavit dated 17.01.2022, submitting as under:-
- i) That the scope of the present petition be limited to Deen Bandhu Chottu Ram Thermal Power Plant (DCRTPP), Yamunanagar alone as the work of setting up of conveyance network and Tertiary Water Treatment Plant (TWTP) has been decided by the State Level High Power Committee to be carried out in DCRTPP as pilot project first. It was decided that possibilities for laying of TWTP at other thermal power plants such as Rajiv Gandhi Thermal Power Plant (RGTPP), Hisar and Panipat Thermal Power Stations (PTPS) would be considered after evaluation of results of TWTP at DCRTPP. Thus, any relief sought qua RGTPP or PTPS is premature and shall not be considered at this stage.
 - ii) That a declaration to the effect that setting up of a tertiary power plant by the HPGCL as 'Change in law' event would impact the consumers as huge cost is involved in setting up of the same would have to be passed through the tariff. The proposal for offsetting the capital cost to be incurred for making treated water fit for use in thermal power plant may be directed to be taken up with the State Government for offsetting said expenditure against some subsidy/incentive to be offered by the State Government. The capital expenditure for laying of conveyance network and tertiary treatment plant at DCRTPP equivalent to the average expenditure incurred by the HPGCL on water supply to the plant for the balance

life of the plant can be offset to the account of savings that the HPGCL will accrue on commissioning of conveyance network and TWTP and the balance expenditure can be borne by the Government of Haryana. This proposal shall be dealt with at the level of the State Government first before the Hon'ble Commission adjudicates the present petition.

- iii) That at present, none of the States or Central Regulatory Commission has passed any order with respect to the use of treated water as per the Tariff Policy 2016 as 'Change in Law' event. It is pertinent to note the order of the Hon'ble CERC in petition no.30/MP/2017, dated 05.05.2017, wherein NTPC sought recovery of the additional expenditure to be incurred for usage of treated sewage water in various thermal power plants consequent to promulgation/ introduction of Clause 6.2(5) in the Tariff Policy, 2016 dated 28.1.2016 as Change in Law events. After brief arguments, the said petition was withdrawn by the NTPC Limited as it failed to make out cases for each of its generating station where treated sewage water is proposed to be used. The relevant extract of the said order is reproduced hereunder:

*"a. Learned counsel appearing on behalf of Gujarat Urja Vikas Nigam Limited (GUVNL) has submitted that the petition is not maintainable in the present form and has been filed in a vague manner without giving any clarity as to which generating stations would be affected, what is the cost to be incurred in respect of each generating station and how the sewage treatment will be done in each of the generating stations. Moreover, the Petitioner has not conveyed as to whether the Municipal Corporations are in a position to supply treated sewage water to the Petitioner's Power Plants as envisaged under the Tariff Policy when they might have already committed the treated water to other bodies for alternate usage. Learned counsel for GUVNL submitted that the Petitioner has annexed only one Water Agreement entered into with Vidharbha Irrigation Development Corporation for Mauda STPS to illustrate that it is required to pay fixed cost pertaining to procurement of water to such enterprises, which is not even relevant to support the contention of the Petitioner that additional expenditure incurred on account of sewage treatment plants be allowed to them as such enterprises are admittedly having the back-up sources of water. **Learned counsel for GUVNL submitted that the present petition needs to be dismissed with a direction to the Petitioner to file proper truing up petitions giving details of the amount sought to be claimed as a Change in Law in respect of each of the generating station to the Commission and in this way, the beneficiaries will also get a fair opportunity to respond to such an important issue.***

*b. The Petitioner is presently seeking in-principle approval for use of treated sewage water in some of its power plants. Learned senior counsel for the Petitioner agreed that there is no provision in the 2014 Tariff Regulations for in-principle approval of capital cost. **However, learned senior counsel submitted that the Petitioner shall make out cases***

for each of its generating station where treated sewage water is proposed to be used and approach the Commission with cost and other relevant details and sought permission to withdraw the present petition. Noting the submission of the learned senior counsel for the Petitioner, the Petition is permitted to be withdrawn with liberty to the Petitioner to seek appropriate relief through separate petitions in accordance with law.”

(Emphasis Supplied)

- iv) That in the HERC order dated 18.02.2021 on True-Up for the FY 2019-20, Mid-Year Performance Review for FY 2020-21 and Determination of Generation Tariff for the FY 2021-22 in case no. HERC/PRO-76 of 2020, there was no mention about TWTP in the capital investment plan for the period 2021 to 2025. The HPGCL did not intimate the Hon'ble Commission about any such envisaged expenditure at that stage, which is unfair.
- v) That a very few thermal plants have started using treated water. It is worthwhile to consider the case study published by the World Bank Group on the use of wastewater from Nagpur for its operations by Maharashtra Generation Company (MahaGenCo), in partnership with Nagpur Municipal Corporation (NMC). The provisional capital cost of the project was estimated about Rs. 195 crore, excluding the cost of land, which NMC agreed to provide. NMC also agreed to cover part of the capital cost with a grant of INR 90 crore. MahaGenCo agreed to finance the rest and to assume cost overruns. MahaGenCo committed to build, operate, and maintain the wastewater treatment plant and pay NMC a fixed amount of INR 15 crore (US\$ 2.25 million) a year for the raw wastewater (110 million litres a day). For flows that exceeded the contracted amount, MahaGenCo agreed to pay NMC, INR 2.03 per cubic meter of raw wastewater. The benefits of the deal to MahaGenCo are the cost savings of using wastewater rather than freshwater to meet its water requirements. The treatment and provision of water through this arrangement costed Mahagenco about INR 3.4 (US\$0.05) per cubic meter. Its costs would have been significantly higher if it had sourced fresh water from another municipal or irrigation project (about INR 9.6 (US\$0.13) per cubic meter for recent projects). For NMC, given that its investment was a grant, the royalties from the sale of wastewater to MahaGenCo represent an extra revenue stream of nearly INR 400 crore (US\$ 60 million) over the concession period. This income represents twice the amount of depreciation of the asset and allows NMC to cover the operating and maintenance cost of the existing wastewater treatment plant in Bandewhadi and the cost of some rehabilitation works.
- vi) That HPGCL has based the proposal for setting up of tertiary waste water treatment plant on Koradi Thermal Power Plant (1700MW) where Waste Water Treatment (WWT) Plant was commissioned in 2017. The work order was placed in October 2011 and supply of STP treated water to Koradi Plant was started in April 2016. It took five years to complete the

project and cost of the project therefore, increased to Rs. 211 crores from the awarded cost of Rs. 195 crores. STP at Karodi was sanctioned under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM). Under the project, Nagpur Municipal Corporation (NMC) decided to supply the treated water to Mahagenco for power generation in Khaperkheeda and Koradi plant. The Centre and the State Government were to provide 70% of the funds to the civic body, while the remaining 30% funds were to be provided by the MAHAGENCO on behalf of NMC. Based on the case study of MahaGenCo, there are two salient aspects to be considered – a) a part of the cost in laying of tertiary water plant shall be offset by the State Government; b) the balance cost, to the extent possible, shall be offset by Thermal Power Plant against the savings that will accrue on the commissioning of TWTP getting the water supply for the operations of the Plant.

- vii) That HPGCL issued an e-tender on 20.01.2020 for consultancy services for preparation of Feasibility report, detailed project report, bidding documents etc. for installation of TWTP including related conveyance system for usage of STP Treated Waste Water at 2 x 300 MW DCRTTP Yamunanagar. The work was awarded to M/s Exceltech Consultancy and Projects Pvt Ltd., Jaipur on 23.07.2020. The salient points of the detailed project report are as under –

SN	Description	Particulars
1.	The net quantity of tertiary treated water	21.81 MLD
2.	Reject water	3.19 MLD
3.	Total STP water	25 MLD
4.	The proposed completion period of project on EPC mode	18 months (including commissioning).
5.	Proposed Operation and Maintenance Period of Project	10 years (Extendable for another 5 years or till the life of the Power Plant.
6.	The estimated capital cost of the project	Rs. 91.12 Crores
7.	O&M Cost for 10 years	Rs. 110.59 Crores (including power charges)
8.	Estimated OPEX cost of TTP per day	Rs. 12.69 per m3 (approx.)

- viii) That the DPR for proposed TWTP at DCRTTP, Yamunanagar, as prepared by consultants of HPGCL, has visualized commissioning time as 18 months. The STP plant at Koradi Thermal Power Plant got delayed by more than 3 years. The reasons for delay in that case must be examined diligently and realistic time line for commissioning shall be envisaged so that cost of the project is not increased beyond the quoted amount.
- ix) That before filing the *ibid* petition, HPGCL had circulated agenda to be placed before Steering Committee for Power Planning (SCPP) regarding commissioning of 25.0 MLD TWTP including all required associated works on EPC mode for reuse of treated waste water at DCRTTP, Yamunanagar. The information/detail provided in the said agenda has not been included in the petition filed before HERC. It was stated by HPGCL therein that

presently, HPGCL is using raw water (Canal) for its Thermal Power Plants and only 70% of average raw water consumption of HPGCL Thermal Plants can be replaced with STP treated waste water, which can be used in ash handling, cooling system, fire fighting system etc. Based upon last three years tentative average consumption of Raw Water (Canal) at HPGCL Power Plants, likely consumption of STP treated waste water was tabulated as under:-

SNo.	Name of Power Plants	Average consumption for three years (FY 2016-17 to FY 2018-19)	Likely consumption of STP treated waste water at the Power Plant (70% of average consumption)
1.	PTPS, Panipat	25 MLD	18 MLD
2.	DCRTPP, Yamunanagar	30 MLD	21 MLD
3.	RGTPP, Hisar	35 MLD	25 MLD
	Total	90 MLD	64 MLD

- x) That DCRTPP, Yamunanagar is receiving raw water (Canal) at rate of Rs. 10 per KL. The specific water consumption allowed by MoEF&CC is 3.5 m³ / MWh. Therefore, the cost of raw water (Canal) for production of one unit of electricity (Kwh) is 3.5 paisa. The impact of using STP treated water (Jagadhari and Yamunanagar STP) on OPEX was depicted as under:-

Sr. No.	Description	Cost per KL (in Paisa)
1.	Tentative cost of STP treated waste water to be supplied by PHED	300
2.	OPEX cost of use of STP water at DCRTPP (upon installation of TTP Project).	1269
3.	Above total cost (1+2)	1569
4.	Cost of raw water (Canal) at DCRTPP	1000
5.	Differential burden on HPGCL upon use of STP water instead of raw water (3-4)	569
Note:- The impact on per unit cost of electricity for use of STP treated waste water would be about 2 paisa/kWh other than the capital cost to be incurred by HPGCL for installation of TTP Project at DCRTPP.		

- xi) That water consumption pattern of a typical thermal power plant was depicted in the agenda as below:

S. No.	Water Requirement	Requirement in %
1.	Make up water requirement for cooling water system and ash evacuation	72.0 to 78.0 %
2.	Other misc. requirements	10.0 to 11.0 %
3.	Service water, AHP seal water, Fire fighting, Coal dust suppression	9.0 to 10.0 %
4.	D.M. Water requirement	3.0 to 4.0 %
5.	Potable water for plant & Colony	1.25 to 1.50%

- xii) That HPGCL has admitted in the ibid agenda that they are using Canal raw water for its Thermal Power Plants and only 70% of average raw water consumption of HPGCL Thermal

Plants can be replaced with STP treated waste water, which can be used in ash handling, cooling system and fire fighting system etc. From the foregoing statement, it is evident that the quality of the required water for thermal power plant should be good enough to be used for cooling water system and ash evacuation. In the meeting of State level High Power Committee held on 06.01.2020, it was observed that HPGCL has to create TWTP at thermal plants to get water with reduced Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD).

- xiii) That HPGCL in the foregoing agenda assumed tentative cost of STP treated waste water to be supplied by PHED as Rs. 3 per KL. This STP treated waste water is currently being discharged in rivers and other water bodies as surplus water resulting in pollution of the water bodies and resultantly endangering the environmental safety and ambience. Besides, this unused water also percolates into the sub-soil strata causing contamination of the ground water regime and thus, resulting in a potential threat to the health of the public. Any cost paid for the same increases the overall cost of the treated water. Considering that the STP treated waste water is being put to use by the Thermal Power Plant in the larger environmental and public interest, the HPGCL should deliberate with the Government of Haryana to waive off any cost for STP treated waste water which will be an input for the TWTP. In addition to the same, the State Government should be approached to offset a part of the capital expenditure involved in setting up of TWTP by way of incentive/subsidy to make it a feasible venture for the Thermal Power Plant and to not burden consumers with extra cost.
- xiv) That the treated water produced by STP set up by the local bodies, which has to be used as input water for TWTP was analysed both by HPGCL as well as the consultants. There were large variations in the results of various parameters of the water. The outlet parameter results of 24 MLD STP Parwaloo and 20.0 MLD STP Badi Majra analysed by the Consultant and HPGCL are tabulated hereunder for ready reference –

Parameter (in mg/L)	24 MLD STP Parwaloo		20.0 MLD STP Badi Majra		Desired parameters at the outlet of proposed TTP
	Result reported by Consultant	Result reported by HPGCL	Result reported by Consultant	Result reported by HPGCL	
pH	8.04	7.21	7.51	7.28	7.5 to 8.3
BOD3 @ 20 degree C	10	5.84	24	8.27	< 2
Total Dissolved Solids in PPM	534	352	498	501	<250
COD	33	19.76	86.6	29.64	<10

- xv) That the variation in the reported results of the Consultant and the HPGCL evince that quality of input water to TWTP is difficult to assess. It is therefore, imperative that the proposal to set up TWTP shall be evaluated keeping in view the financial viability of the project. For example, Reverse Osmosis (RO) System is required to make the water potable

which is not the purpose of proposed TWTP. It is therefore, suggested that further studies of commissioned TWTP shall be made by the HPGCL in the matter before allotment of work.

- xvi) That the life span of TWTP vis-à-vis the remaining life of thermal plant as the capital expenditure on commissioning of the TWTP may have to be spread over the life of the TWTP. In case, life span of TWTP goes beyond the life span of thermal plant, the capital expenditure shall be suitably proportioned to the relevant State Agency which may put such water into use after the useful life of thermal power plant.
 - xvii) That HPGCL plants are not scheduled upto their normative capacity in line with MoD principle. Therefore, it is even more significant to ensure that the TWTP proposed to be set up becomes financially viable enough to not burden the consumers unnecessarily.
 - xviii) That HPGCL ought to have approached this Commission prior to initiating the process of availing consultancy services. The expenditure incurred on consultancy services i.e. Rs. 16.5 lakh as onetime expense shall therefore, not be considered as pass through in the tariff of the petitioner in the absence of the prior approval of this Hon'ble Commission.
 - xix) That without prejudice to the foregoing, in the event the Hon'ble Commission considers according in-principle approval of the tentative cost of TWTP, the expenditure incurred for commissioning of TWTP must be segregated into two components i.e. fixed charges and variable charges as per the procedure framed by the Hon'ble CERC for commissioning of the FGD Plant. Similarly, the increase in auxiliary consumption may be dealt in the same way as specified in the procedure set by the Hon'ble CERC for commissioning of FGD Plant. Any in-principle cost approved by the Hon'ble Commission shall be made subject to prudence check after submission of all relevant documents.
4. HPGCL filed the rejoinder to the reply of HPPC, along with an affidavit dated 02.02.2022. HPGCL has relied heavily on the State Government Notification dated 31.10.2019 and briefly submitted as under:-
- i) That Regulation 3.3 of the HERC MYT Regulations, and Regulation 26 of the CERC Tariff Regulations, 2019, which strictly covers present case and therefore, in view of the same, present Petition ought to be allowed by this Hon'ble Commission. It is also relevant to highlight definition of the "additional capitalization" under Regulation 26 of the CERC Tariff Regulations, 2019, which covers "Tertiary Treatment Plants" and similar also is encapsulated under Regulation 18(2) of the HERC MYT Regulations, 2019.
 - ii) That any expenditure incurred or projected to be incurred on the project after commercial operation date amounts to additional capitalization. Since TTP is going to be an integral part of the project, therefore, it would invariably get covered under additional capitalization in terms of Regulation 3.3 read with 18.2 of the HERC MYT Regulations, 2019. Further, one must also appreciate relevance of the word "projected". The inclusion of the said

phrase in the additional capitalization itself demonstrates the fact that in-principle approval as a regulatory principle and norm is embedded into the HERC MYT Regulations.

- iii) That HPGCL is bound by the law of the land i.e., Policy of the Govt of Haryana, National Tariff Policy, HERC MYT Regulations, 2019 and have to abide all the conditions imposed in the policy to protect the natural resources of the State.
- iv) That HPGCL is seeking the relief to declare the notification dated 30.10.2019 as “Change in Law” which is applicable for the State of Haryana based thermal projects and also falls under Section 107/108 of the Electricity Act,2003. The petitioner has only sought the present relief for DCRTTP as a pilot study. Further, to avoid wastage of the precious time of the Hon’ble Commission, only “In-principle” approval has been sought, which automatically has been implied once the notification dated 30.10.2019 becomes “Change in Law”. Thus, the submission made by HPPC needs to be rejected in the matter.
- v) That in case HPGCL proceeds for having its own TTP, it becomes part of the plant and may be used for plant life cycle. After the useful life of the thermal units of HPGCL, TTP may be transferred to any department on the depreciated asset value as per the Govt. instructions, which ultimately would pass back to the DISCOMs as per regulation; thus apprehensions raised in the matter are arbitrary and needs to be rejected.
- vi) That HPGCL has already taken up the matter with Public Health & Engineering Department for seeking the Grant/Subsidy in the matter. In case any grant/subsidy is granted by Government, the cost of the TTP shall be reduced, accordingly.
- vii) That the order dated 05.05.2017 passed in petition no. 30/MP/2017 by the Hon’ble CERC has no applicability on the present matter. The said order was passed in the context of incomplete information and details being provided before the Hon’ble CERC, even details of the projects were not provided. However, here is the case, wherein the petitioner has provided all details. Even DPR has been provided which contains all details in relation to the issue in hand. Further, a matter adjudicated as withdrawn with liberty to file fresh petition cannot be construed as a legally binding precedent. It has no force in law and cannot be relied upon. In the present petition, HPGCL has specifically quoted that the Regulation of the Hon’ble CERC for Additional Asset Capitalization covers the issue of TTP which is beyond the original scope under the Tariff Regulation 2019-2024, and considered as pass through subject to prudent check by the Hon’ble Commission as per Section 61 of the Electricity Act, 2003. Thus, the guiding principle is already in place, after enactment of the CERC Regulations 2019-24.
- viii) That HPGCL being generating entity does not have the expertise in the TTP. To carry any study of different domain, help of an expert is required, like DISCOMs seek in every aspect of having substation design to making a forecast on demand supply or even comparing the

offers of the power procurements. Thus, the help of a consultant is needed for the non-core business in the matter.

- ix) That in case of Karodi Thermal, STP is situated at a distance of 20 kms in comparison to 1.6 kms distance of DCRTTP to TTP. There were many rights of way issues and change of scope of work which was the reason for delay of the work related to Karodi Thermal.
- x) That the apprehensions of HPPC on the input water study, which is the sole prerogative of Genco and not on their domain of business is a welcoming one. HPGCL shall ensure to use the best possible option for better results. However, HPGCL would like to draw the attention of the Hon'ble Commission that the TTP shall always be designed on the basis of worst quality of water reported for treatment. The sample of HPGCL and the Consultants were sent to different labs and also on different dates. Thus, variation was there in the results.
- xi) That water charges fall under the category of O&M only. Thus, all components passed through in the matter shall be part of fixed cost only. HPGCL regrets to submit that the issue of fixed and variable charges created by HPPC is hypothetical and not as per regulations.

Proceedings in the Case

- 5. The case was heard through video conferencing on 09.02.2022, as scheduled, in view of the COVID-19 pandemic. The petitioner as well as the respondent herein, mainly reiterated the contents of their petition and written submissions, respectively, which for the sake of brevity have not been reproduced here.

Commission's order

- 6. The Commission has heard the arguments of the parties at length as well as perused the filings placed on record by the parties. Before examining the petition on merit, the Commission has proceeded to examine the fact that whether in-principle approval can be granted considering the proposed expenditure under "Change of Law", under the HERC MYT Regulations, 2019. In this regard, the Commission observed that Regulation 18.2.1 and 18.2.2 of the HERC MYT Regulations, 2019 provides as under:-

"18.2.1 The Commission may consider allowing, subject to prudence check, any additional capital expenditure incurred or projected to be incurred, after the commercial operation date of a project and up to the cut-off date, on the following provided the same was part of the original scope of work of the project:

- (a) Deferred liabilities without any carrying cost;*
- (b) Works deferred for execution without any escalation;*
- (c) Procurement of initial capital spares in the original scope of work without any*

escalation, subject to ceiling specified above;

- (d) Foreign exchange rate variation;*
- (e) Liabilities to meet award of arbitration provided that it is not on account of any fault of the generation company or the licensee, as the case may be;*
- (f) Liabilities on account of compliance of the order or decree of a court;*
- (g) Liabilities on account of change in law:*

Provided that details of the works included in the original scope of work along with estimates of expenditure, un-discharged liabilities and works deferred for execution shall be submitted along with the application for determination of tariff after the date of commercial operation of the project;”

“18.2.2 The Commission may consider admitting, after prudence check, the capital expenditure of the following nature actually incurred after the cut-off date:

- (a) Deferred liabilities relating to works / services within the original scope of work without any escalation;*
- (b) Liabilities to meet award of arbitration provided that it is not on account of any fault of the generation company or the licensee, as the case may be;*
- (c) Liabilities on account of compliance of the order or decree of a court;*
- (d) Liabilities on account of change in law;*
- (e) Any additional works / services which have become necessary for efficient and successful operation of the project, but not included in the original project cost;”*

Apparently, regulation 18.2.1 and 18.2.2 are distinguishable on the basic premise that regulation 18.2.1 covers the additional capitalization, provided the same was part of the original scope of work of the project; whereas regulation 18.2.2 cover the cases of additional capitalization other than cases covered under 18.2.1 i.e. which does not form part of the original scope of work of the project. Both regulation 18.2.1 and 18.2.2 covers the liabilities on account of change of law. But, regulation 18.2.1 covers any additional capital expenditure incurred or projected to be incurred; whereas regulation 18.2.1 covers the capital expenditure actually incurred after the cut-off date. (Emphasis supplied).

The Commission observes that the proposed expenditure to be incurred pursuant to the “Policy on Reuse of Treated Waste Water” issued by the Govt. of Haryana in line with the National Tariff Policy, 2016, was not part of the original scope of the capitalization of the power plants of HPGCL; hence cannot fall under regulation 18.2.1 but has to be considered under regulation 18.2.2, which does not allows the grant of in-principle approval of additional capitalization.

The Commission has taken note of the submission of HPGCL that the Hon'ble Central Commission has incorporated the relevant provision in regulation 26 of its Tariff Regulations, 2019 which covers "Tertiary Treatment Plants". However, the similar provision does not form part of the HERC MYT Regulations, 2019 and this Commission is not bound to borrow and bound by the provisions of any other regulations. In this regard, the Commission has also observed that NTPC had filed a similar petition before the Hon'ble CERC (Petition No. 30/MP/2017), under CERC Tariff Regulations, 2014, which has not incorporated special provision with respect to the "Tertiary Treatment Plants". The Hon'ble CERC, vide its order dated 05.05.2017, had decided as under:-

"Learned counsel appearing on behalf of Gujarat Urja Vikas Nigam Limited (GUVNL) has submitted that the petition is not maintainable in the present form and has been filed in a vague manner without giving any clarity as to which generating stations would be affected, what is the cost to be incurred in respect of each generating station and how the sewage treatment will be done in each of the generating stations. Moreover, the Petitioner has not conveyed as to whether the Municipal Corporations are in a position to supply treated sewage water to the Petitioner's Power Plants as envisaged under the Tariff Policy when they might have already committed the treated water to other bodies for alternate usage. Learned counsel for GUVNL submitted that the Petitioner has annexed only one Water Agreement entered into with Vidharbha Irrigation Development Corporation for Mauda STPS to illustrate that it is required to pay fixed cost pertaining to procurement of water to such enterprises, which is not even relevant to support the contention of the Petitioner that additional expenditure incurred on account of sewage treatment plants be allowed to them as such enterprises are admittedly having the back-up sources of water. Learned counsel for GUVNL submitted that the present petition needs to be dismissed with a direction to the Petitioner to file proper truing up petitions giving details of the amount sought to be claimed as a Change in Law in respect of each of the generating station to the Commission and in this way, the beneficiaries will also get a fair opportunity to respond to such an important issue.

*The Petitioner is presently seeking in-principle approval for use of treated sewage water in some of its power plants. Learned senior counsel for the Petitioner agreed that **there is no provision in the 2014 Tariff Regulations for in-***

principle approval of capital cost. However, learned senior counsel submitted that the Petitioner shall make out cases for each of its generating station where treated sewage water is proposed to be used and approach the Commission with cost and other relevant details and sought permission to withdraw the present petition. Noting the submission of the learned senior counsel for the Petitioner, the Petition is permitted to be withdrawn with liberty to the Petitioner to seek appropriate relief through separate petitions in accordance with law.”

Thus, as per HERC Regulations occupying the field, the capital expenditure actually incurred, on account of change of law, shall be allowed. Further, CERC (Terms and Conditions of Tariff) Regulations, 2019 has provision for in principle approval of the additional capitalization for installation of additional equipment for Tertiary treated water plants. However, the ibid provisions sans its presence in the HERC MYT Regulations, 2019 under which the petitioner is governed.

The Commission observes that HPGCL has approached the Commission for in-principle approval of the expenditure based on the DPR prepared by the consultants. The so-called ‘DPR’ is based on the projections and estimates, which can by no means be considered as a credible piece of evidence in support of the claim of the petitioner as the competitive bidding process has not been initiated and no indicative cost has been ascertained. The Commission observes that the petitioner has not demonstrated any cost benefit analysis, pay-back period of the proposed expenditure, utilization of treated water taking into consideration of its historical PLF and is still in the process of seeking subsidy/grant from the State Government.

Therefore, the Commission, at this stage, is not going into the claims as the cost is yet to be discovered through a transparent process of competitive bidding to be undertaken by the petitioner in concurrence with HPPC, subject to prudence check by the Commission as well as the HERC Regulations occupying the field. However, it would suffice to say that this Commission having determined the capital cost and tariff for this project, any additional expenses of capital nature has to be within the four corners of the definition and regulatory dispensation on “Additional Capitalization”. The starting point of the dispensation is that the capex ought to have been actually incurred by the generating company and admitted by the Commission after prudence check even if the same had to be incurred due to any statutory provisions post CoD of the project. **Hence, the Commission is estopped from according in-principle approval(s) as prayed for by the petitioner herein.**

Additionally, it is observed that the DCR TPS is more than 14 years old and in terms of operating efficiencies and cost may not be comparable to pit head based power plants / super critical TPS. Hence, with the professed national agenda of scaling the RE Power to 50% in the consumption and also the Gol policy of exiting from PPAs with Thermal Power Plants having completed 25 years, the petitioner ought to carry out a rigorous cost-benefit analysis as well a realistic payback period based on the emerging trend in scheduling of DCR TPS / actual PLF attained in the recent past as well as going forward. The petitioner is directed to clarify whether the financial viability of the present pilot project has been brought to the knowledge of the State Government and the efforts made to secure subsidy / subvention for the pilot project including cost sharing with relevant public authority like Public Health and Engineering Department.

Further, in order to take the process forward, the petitioner and the answering respondent shall form a committee of experts to firstly ensure that incurring the proposed expenditure is a financially prudent decision and the social cost arising therefrom especially in view of the stated position that it is a pilot project. Thus, after ascertaining the financial feasibility at stage one, the committee may oversee the bidding process so as to ensure that the price discovered is lowest and aligned to the prevailing market conditions. It is, however, made clear that the petitioner, after conclusion of bidding process and prior to award of work, shall approach this Commission with a petition with all the requisite details and documents to enable the Commission to assess the reasonableness of the project, capital cost discovered, requisite O&M cost and also the manner in which the same shall be recovered from the respondent herein.

In terms of the above order, the present petition is disposed of.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 21.02.2022.

Date: 21.02.2022
Place: Panchkula

(Naresh Sardana)
Member

(R.K. Pachnanda)
Chairman