

**IN THE APPELLATE TRIBUNAL FOR ELECTRICITY
(Appellate Jurisdiction)**

Appeal No. 100 Of 2017

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Appeal No. 389 Of 2018

Date: 28th August, 2024

**Present: Hon'ble Sandesh Kumar Sharma, Technical Member
Hon'ble Mr. Virender Bhat, Judicial Member**

Appeal No. 100 of 2017

IN THE MATTER OF:

Greenko Budhil Hydro Power Private Limited
Plot no. #1367, Road No. 45, Jubilee Hills,
Hyderabad, Telangana - 500 033.

...Appellant(s)

VERSUS

1. The Secretary,
Uttarakhand Electricity Regulatory Commission
Vidhyut Niyamak Bhavan
ISBT Chowk, Majra,
Dehradun, Uttarakhand – 248171.

2. The Managing Director,
Uttarakhand Power Corporation Limited
Victoria Cross Vijeyta Gabar Singh,
Urja Bhawan, Kanwali Road,
Balliwala Chowk,
Dehradun, Uttarakhand – 248001.

...Respondent(s)

Counsel for the Appellant(s) : Mr. Sanjay Sen, Sr. Adv.
Mr. Hemant Singh
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Mr. Mridul Chakravarty
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Ms. Stuti Krishn
Ms. Anchal
Mr. Raunak Jain for R-1

Mr. Pradeep Misra
Mr. Manoj Kr. Sharma
Mr. Suraj Singh
Mr. Shashank Pandit for R-2

Appeal No. 389 of 2018

IN THE MATTER OF:

Uttarakhand Power Corporation Limited
Victoria Cross Vijeta Gabar Singh Urja Bhawan,
Kanwali Road, Dehradun,
Uttarakhand – 248001.

...Appellant(s)

VERSUS

1. The Managing Director,
Greenko Budhil Hydro Power Private Limited
Village Kharamukh,

PO Garola, Bharmour Tehsil,
District Chamba, Himachal Pradesh – 176309.

2. The Secretary,
Uttarakhand Electricity Regulatory Commission
Vidhyut Niyamak Bhavan
Near ISBT Chowk, P.O. Majra,
Dehradun, Uttarakhand – 248171.

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Ms. Shikha Ohri
Ms. Soumya Malhotra R-1

Mr. Buddy A. Ranganadhan
Ms. Nandini Tomar
Ms. Avani Bagaria
Ms. Stuti Krishn
Mr. Raunak Jain for R-2

JUDGEMENT

PER HON'BLE MR. SANDESH KUMAR SHARMA, TECHNICAL MEMBER

1. The Appeal No. 100 of 2017 has been filed by M/s Greenko Budhil Hydro Power Private Ltd (in short "GBHPPL" or "Appellant") challenging the generation tariff order dated 30.11.2016 (in short "Impugned Order"), passed by the Uttarakhand Electricity Regulatory Commission (in short "UERC" or "Respondent Commission").

2. The second captioned Appeal No. 389 of 2018 has been filed by M/s Uttarakhand Power Corporation Ltd. (in short "UPCL") also challenging the order dated 30.11.2016 passed by UERC in Petition under Section 62 and 86(1)(a) of the Electricity Act, 2003 read with the relevant provisions of UERC (Terms & Conditions for Determination of Tariff) Regulations, 2011 (in short "Tariff Regulations") and UERC (Terms & conditions for Determination of Mufti Year Tariff) Regulations, 2015 (in short "MYT Regulations") for determination of tariff for supply of power from the 70 MW Hydro Electric Power Project (in short "Project") to UPCL.

Description of the Parties:

3. M/s. Greenko Budhil Hydro Power Private Ltd. (GBHPPL) is a generating company that has set up a 70 MW HEP in the State of Uttarakhand.

4. M/s. Uttarakhand Power Corporation Ltd. (UPCL) is the distribution licensee in the State of Uttarakhand.

5. The Uttarakhand Electricity Regulatory Commission has been constituted under the provisions of the Electricity Act, 2003 *inter-alia* vested with the powers to adjudicate the dispute in hand.

Factual Matrix of the Case

6. The Appellant viz. Greenko Budhil Hydro Power Pvt. Ltd. owns and operates a 70 MW (2 x 35 MW) Hydro-electric power plant located on Budhil stream, in Bharmaur tehsil, Chamba District, Himachal Pradesh.

7. The power generated from the Project is supplied to Respondent No. 2, Uttarakhand Power Corporation Ltd through 18 KMs dedicated 220 kV tie-line connected to the PGCIL's 220/ 400 kV Grid Sub-station which is located near the 231 MW Chamera III Hydro-electric power project of NHPC Ltd. Appellant.

8. The Appellant has filed the first captioned appeal challenging the Generation Tariff Order dated 30.11.2016 passed by the State Commission, whereby, the following tariff components were disallowed:

- (i) Erroneous computation of Design Energy owing to non-consideration of minimum environment discharge obligation at all times through the year;
- (ii) Non-consideration of Tie-Line losses in the computation of saleable energy; and
- (iii) Erroneous disallowance of Capital Cost of the Project on account of the following:
 - (a) Interest During Construction (**IDC**) due to time overrun beyond the control of the Appellant;

- (b) Certain soft costs incurred by the project on account of time-
overrun due to factors beyond the control of the Appellant;
- (c) Geological surprises beyond the control/contemplation of the
Appellant.

9. The quantum of power available for sale is determined after accounting for auxiliary consumption, tie-line losses, and free power obligations towards the Govt. of Himachal Pradesh (in short "GoHP").

10. The Project was set up pursuant to a Memorandum of Understanding dated 23.09.2004 (in short "MoU") signed between the GoHP and the Appellant (which was earlier named "Lanco Green Power Private Limited"), thereafter, as required under the MoU, a Detailed Project Report (in short "DPR") was prepared and submitted to the GoHP by the Appellant in February 2005, for grant of Techno-Economic Clearance (in short "TEC").

11. Subsequently, the TEC dated 02.06.2005 was granted by the GoHP (in short "2005-TEC").

12. Following the 2005-TEC, on 22.11.2005, an Implementation Agreement (in short "IA") was signed between the Appellant and the GoHP, and subsequently amended on 03.09.2007 and 01.03.2014.

13. However, due to various changes in project timelines and cost, the GoHP, after due diligence, issued a revised cost approval vide its letter dated 20.08.2010 (in short "Revised Cost Approval").

14. Afterward, the name of the Appellant was changed from "Lanco Green Power Pvt. Ltd" to "Lanco Budhil Hydro Power Pvt Ltd" vide the Registrar of

Companies certificate dated 06.08.2010, and further, to its present name, i.e. "Greenko Budhil Hydro Power Pvt Ltd" vide the Registrar of Companies certificate dated 20.11.2014.

15. In 2015, the Appellant submitted a proposal to UPCL for the supply of power on a long-term basis from the Project, consequently, the Respondent No. 2, accepting the proposal, filed a petition before the State Commission, seeking approval of the Draft Power Purchase Agreement (in short "Draft PPA"), proposed to be signed with the Appellant for purchase of power.

16. On 07.11.2015, the Appellant also filed a petition under Section 62 and 86(1)(a) of the Electricity Act, 2003 for the determination of generation tariff for the supply of power from the Project to the Respondent No. 2 for the following periods:

- i) For the remaining period of FY 2015-16; and
- ii) For FY 2016-17 to FY 2018-19.

17. It is stated that tariff for the remaining period of FY 2015-16 has been determined by the State Commission as per the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011 (in short "UERC Tariff Regulations, 2011"), however, for the period FY 2016-17 to 2018-19, the tariff has been determined by the State Commission as per UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015 (in short "UERC Tariff Regulations, 2015").

18. On 20.11.2015, the State Commission passed an interim order, allowing the Appellant to supply power to the Respondent No. 2 at a provisional tariff *inter-*

alia also observing certain deficiencies in the tariff petition filed by the Appellant, and accordingly directed the said Appellant to submit its reply.

19. In response to the State Commission's order dated 20.11.2015, the Appellant filed its reply vide letter 14.01.2016 along with a petition for approval of the Business Plan in pursuance of the said order.

20. The Appellant vide the said reply sought time to file replies to queries no. 5 and 16 of the State Commission relating to the justification of time and cost overrun of the Project.

21. Thereafter, on 05.03.2016, the Appellant filed its reply to the remaining queries no. 5 and 16 of the State Commission regarding the justification of the time and cost overrun, vis-à-vis the project time and cost estimated as per the Revised Cost Approval.

22. The State Commission vide its letter dated 16.03.2016 raised certain additional queries, and accordingly the Appellant filed its reply dated 16.04.2016 before the State Commission.

23. Thereafter, the Respondent Commission vide its letter dated 27.04.2016 raised certain additional queries, which were replied to vide letter dated 14.05.2016, further, the Appellant also participated in the Technical Validation Session held by the State Commission on 19.05.2016, wherein the State Commission sought further clarifications from the Appellant which were duly replied.

24. The State Commission vide its letters dated 10.05.2016, 23.05.2016, and 01.06.2016 raised further queries seeking justification for the deviation of actual

project cost and timelines against the project cost and timelines envisaged specifically under the DPR and TEC.

25. The State Commission also conducted a public hearing on 07.06.2016 at the office of the State Commission in Dehradun, with due notice to the general public through a notice published in leading dailies, to hear objections/comments from the general public concerning the tariff determination proceedings qua the Appellant.

26. Accordingly, on 28.06.2016, the Appellant filed its reply to all the queries as sought by the State Commission vide its letters dated 10.05.2016, 23.05.2016, and 01.06.2016, wherein the Appellant provided a detailed justification of the various reasons for time and cost overrun in the project, vis-a-vis the DPR.

27. Thereafter, the State Commission vide a letter dated 17.08.2016, raised further queries, and the Appellant accordingly filed its reply to the same vide a letter dated 13.09.2016.

28. The Appellant also filed certain additional submissions on 28.09.2016 to further elaborate its earlier submissions dated 28.06.2016 and 13.09.2016.

29. Finally, the State Commission passed the tariff order dated 30.11.2016, thereby approving the tariff for the Project for the supply of power to the Respondent No. 2.

30. The said order has been impugned in the captioned appeals.

31. We will first take up Appeal No. 100 of 2017 and then Appeal No. 389 of 2018.

Submissions of the GBHPPL in Appeal No. 100 of 2017

32. The Appellant submitted the following relevant dates and documents as part of the Appeal and its pleadings:

- a. Appellant submitted Detailed Project Report (“DPR”) for the purpose of Techno Economic Clearance in February 2005 [*@ Pg. 1301 (Vol-V)*];
- b. TEC was granted by Government of Himachal Pradesh on 02.06.2005 [*@ Pg. 1607 (Vol-VI)*];
- c. Implementation Agreement dated 22.11.2005 was executed between the Appellant and Government of Himachal Pradesh [*@ Pg. 166 of Vol-I*];
- d. **SCOD** under implementation agreement was September 2009 (*being 84 months from the Effective Date*) [*@ Pg. 175 [Vol-I]*];
- e. Forest Approval was granted by Government of Himachal Pradesh on 03.03.2010 [*@ Pg. 1702 of Vol-VI*];
- f. Government of Himachal Pradesh issued revised cost approval on 20.08.2010 [*@ 1619 of Vol-VI*];
- g. **The Project was commissioned on 30.05.2012 (Delay of 32 months from SCOD)**;
- h. PPA was executed between Respondent No. 2/ UPCL and the Appellant in 2015

- i. Appellant filed a petition on 07.11.2015 before the UERC [A-3 @ Pg. 215 of Vol-I];
- j. By way of an interim order dated 20.11.2015, the UERC allowed the Appellant to supply power to Respondent No. 2/ UPCL at a provision tariff. [@ Pg. 676 of Vol-III];
- k. Respondent No. 1/ the UERC passed the final order dated 30.11.2016 [@ Pg. 215 of Vol-I].

33. The issue-wise submissions of the Appellant are provided in the succeeding paragraphs.

Issue 1- Erroneous Computation of Design Energy

[Ref: Para 4.1 of impugned Order @ Pg.119, V1 of the Appeal]

34. The Appellant submitted that the UERC did not correctly consider the statutory obligation of maintaining the minimum discharge flow at all times, irrespective of the season, the said obligation has been mandated by the Himachal Pradesh State Pollution Control Board by way of notification dated 16.07.2005, as amended on 09.09.2005, issued under the Environment (Protection) Act, 1986, the relevant extracts of the amendment notification dated 09.09.2005 are as below:

“In partial modification of this department’s notification of even number dated 16.07.2005 vide which directions in exercise of the powers conferred by the provisions of Section 5 of the Environment (Protection) Act, 1986 were issued, the quantum of minimum flow of water to be released and maintained immediately downstream of the diversion structures of existing and upcoming hydel projects

throughout the year should be read as threshold value of not less than 15% of the minimum inflow observed in the lean season; to the main river water body whose water is being harnessed by these project, ...”

35. The UERC failed to take into account that the above requirement does not allow any relaxation to the Appellant to discharge the minimum discharge flow during the monsoon season, therefore, sufficient availability of water in the downstream structure during the monsoon season is not to be considered as a factor while determining Design Energy.

36. As per the approved DPR (reference Table 6.5), the minimum discharge during the lean season is 6.06 Cumecs, accordingly, the 15% statutory minimum environment flow is 0.91 Cumecs, thus, the project is releasing the statutory minimum environment flow of 0.91cumecs throughout the year, including the monsoon period can be observed therein, which is a publicly available data.

37. It is thus stated that the Appellant while complying with the above notification, maintained the statutory minimum discharge of 15% even in monsoon season, however, the State Commission while passing the impugned Order has erroneously considered design energy as 283.54 MUs instead of 280 MUs, for recovery of tariff, thereby resulting in lesser per unit tariff to the Appellant.

Issue 2- Disallowance of Tie-Line Losses

[Ref: Para 3.6 of the impugned Order @ Pg. 118, V1 of Appeal]

38. The UERC while deriving the saleable energy, disallowed the deduction towards tie-line losses up to the delivery point of the beneficiary from ex-bus

energy and free energy to the State, it has been observed that saleable energy is determined from the Design Energy after deducting allowable normative auxiliary consumption as per the Regulations and free energy to the State.

39. Accordingly, the UERC held that the deduction of energy in lieu of tie-line losses, as submitted by the Appellant, is not in accordance with the Regulations, hence the same was not considered for computation of saleable energy and corresponding energy charge rate.

40. The Appellant argued that Regulation 3(35) of the UERC Tariff Regulations, 2011, and Regulation 3(37) of UERC Tariff Regulations, 2015 define Generation Tariff as under:

“tariff for ex-bus supply of electricity from a generating station.”

41. Also, the above has been reiterated in several places in the Regulations, i.e., Regulations 3(22), 3(68), 49(3), 49(5), 50(3), 50(4) of UERC Tariff Regulations, 2015, it is implied that any losses beyond the power plant ex-bus including tie-line losses are to the account of the beneficiary i.e. Respondent No.2.

42. Regulation 54(4) of UERC Tariff Regulations, 2011, while providing for computation and payment of Capacity Charge and Energy Charges for Hydro Generating Stations, *inter-alia*, provides as under:

“54. Computation and payment of Capacity Charges and Energy Charges for Hydro Generating Stations

(1) The annual Fixed Charges of Hydro Generating Station shall be computed on annual basis, based on the norms specified under these Regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and Energy Charge, which shall be payable by the beneficiaries in proportion to their respective share/ allocation in the saleable capacity of the generating station, that is to say, in the capacity excluding the free power to the home State.

...

(4) The Energy Charge shall be payable by every beneficiary for the total energy supplied to the beneficiary, during the calendar month, on ex-power plant basis, at the computed Energy Charge Rate. Total Energy Charge payable to the Generating Company for a month shall be:

(Energy Charge Rate in Rs./ kWh)x {Energy (ex-bus)} for the month in kWh} x (100-FEHS)/ 100”

The above provision also has been carried forward as Regulation 50(4) of UERC Tariff Regulations, 2015.

43. Further, submitted that tie line losses pertain to the energy losses encountered on account of power transmission from the ex-bus to the pooling station of the inter-state grid, in this regard, the PPA provides the “delivery point” as the point at which the UERC determines tariff.

44. Accordingly, the UERC should have determined the generation tariff on an ex-power plant basis as provided under Regulation 54(4) of the UERC Tariff Regulations, 2011, as such, the tie-line losses cannot be booked to the account of the Appellant, thereby reducing the tariff payable.

45. Thus, a generator is entitled to the cost of electricity supplied on the ex-bus basis, and any tie line losses ought to be reimbursed by Respondent No.2.

Issue-3 Disallowance of capital cost due to time overrun

[Ref: Para 4.3.2 of impugned Order @ Pg. 126- 132, V1 of Appeal]

46. The GBHPPL submitted that the UERC vide the Impugned Order has disallowed the time overrun and cost overrun qua project completion on account of the following factors:

- (i) Delay due to frequent changes in the finalization of the evacuation scheme for the project of the Appellant by PGCIL/ CEA;
- (ii) Delay in construction of additional bay at NHPC Chamera III;
- (iii) Delay in signing of the Implementation Agreement;
- (iv) Delay in grant of Forest Diversion clearance;
- (v) Cost and time overrun due to geological overbreak and increase in the Head Race Tunnel Length subsequent to detailed engineering of the Project;
- (vi) Delay due to miscellaneous external factors.

47. The UERC has allowed price variations only up to the SCOD of the Project and disallowed any escalations beyond the said date, it is stated that the State Commission failed to consider the impact of time overrun on account of uncontrollable factors and the consequent impact on the contract prices negotiated by the Appellant with its contractors.

48. The said changes in cost parameters due to the extension of the construction period are summarised below:

Reason	Overall time taken	Period
Factors w.r.t evacuation infrastructure		
Delay by various Govt. authorities in finalizing the evacuation system for Budhil/ Ravi River valley	~4 years	June 2005 to June 2009
Delay by PGCIL and NHPC in commissioning of onward evacuation system	~2.5 years	June 2009 to November 2011 & beyond
Time taken in the construction of Budhil tie-line and commissioning	~6 months	November 2011 to May 2012
Other factors w.r.t approvals and construction (these ran parallel to the evacuation issues)		
Delay in signing of Implementation Agreement on account of policy changes by Govt. of Himachal Pradesh, w.r.t minimum environment discharge and LADA %	~6 months	June 2005 to November 2005
Delay in grant of forest diversion approval	~8 months	August 2005 to April 2006
Delay by Himachal Pradesh – PWD in widening of road from Chamba to Budhil Project site	~3 years	~2007 to 2010
Delay due to geological overbreak, increase in length of HRT	----	
Delay due to various external factors	Throughout construction period	

49. The submissions of the Appellant on factor-wise disallowance are elucidated hereinbelow:

Time overrun

50. In Para 4.3.2 of the Impugned Order, the State Commission has wrongly considered SCOD as 42 months as the implementation period of the Project, however, as per Chapter 1 and other chapters of the DPR, it is 54 months, thus, the same is an error apparent and goes to the root of the present appeal.

51. The factors leading to delay in the implementation of the Project, and beyond the control of the Appellant are listed below:

A.Delay due to frequent changes in the finalization of the evacuation scheme for the project of the Appellant by PGCIL/ CEA

- The UERC has erroneously held that time overrun was on account of the Appellant and as such a controllable event. *[Ref: Para 4.3.2 (i) of impugned Order @ Pg.127, V1]*
- Notably, the Appellant's Project falls under the "Ravi River Basin" evacuation scheme of the CEA, which was envisaged to cater to 8 hydroelectric projects, including 70 MW HEP of the Appellant. *[Ref: Diagram of evacuation plant @ Pg. 1211, V5 of Appeal]*
- Given the number of power projects, transmission lines, sub-stations, and various entities involved in the finalization of the scheme and given different timelines and other constraints of each project, the optimization of the evacuation system had to go through several

iterations. Further, Budhil HEP was the first project in the scheme to come up, thus, it was subjected to the highest amount of confusion and iterations.

- Notably, there were as many as 5 changes during the 4 years between June 2005 and June 2009, as listed below:

Date	Event	Evacuation Scheme	Line specification
6 June 2005 <i>[Ref: Para 3.6 @ Pg. 1640, V6]</i>	CEA meeting	<ul style="list-style-type: none"> • Minutes noted that Budhil had already applied for a Long-term Arrangement (LTA) with PGCIL. • Budhil to lay direct tie-line from Budhil to Chamba pooling station (near Chamera II HEP of NHPC); • Then, PGCIL to lay a line from the Chamba pooling station to Chamera II; 	<ul style="list-style-type: none"> • 220 kV; • 400 kV;
22 Sep 2006 <i>[Ref: Pg. 1649 & 1650, V6]</i>	PGCIL Meeting minutes	<ul style="list-style-type: none"> • Budhil to lay a direct tie-line from Budhil to Chamba pooling station. • Wrt transmission charge of the free power quantum (Govt. of Himachal 	220 kV, DC line, single moose conductor

		<p>Pradesh's entitlement), PGCIL stated that PGCIL suggested that it shall implement the evacuation infrastructure for the project only when BPTA is signed for recovery of the entire transmission charges including for free power corresponding to Himachal Pradesh, and accordingly, Budhil and HPSEB were asked to discuss amongst themselves, and to revert with a decision within 10 days;</p>	
<p>24 Nov 2006 [Ref: Pg. 1652 & 1653, V6]</p>	<p>PGCIL Meeting minutes</p>	<ul style="list-style-type: none"> • It was suggested that since Budhil would be the first power project to come up in the Ravi basin, the transmission charges of the PGCIL system, till it becomes part of the regional system (that is, till Chamera III HEP gets commissioned), should be 	

		<p>borne by PTC/ Budhil, and accordingly, the BPTA (Bulk Power Transmission Agreement) should be signed.</p> <ul style="list-style-type: none"> • The matter could not be concluded. 	
<p>4 Aug 2007 [Ref: Pg. 1657. V6]</p>	<p>Letter from Budhil to PTC (copy to PGCIL)</p>	<ul style="list-style-type: none"> • Budhil stated that Budhil cannot be expected to bear the transmission charges corresponding to 12% free power as it belongs to GOHP/ HPSEB and urged PTC to redraft the BPTA accordingly. 	
<p>23 and 24 Aug 2007 [Ref: Pg. 1658 & 1659, V6]</p>	<p>Meeting with PGCIL and letter to PTC (copy to PGCIL, GOHP, HPSEB, HVPNL)</p>	<ul style="list-style-type: none"> • Further, Budhil held a meeting with PGCIL and followed up with a letter the next day, requesting PTC to confirm the bearing of transmission charges for the system preponed by the beneficiary of power, so that PGCIL may 	

		construct the transmission system immediately.	
29 Aug 2007 [Ref: Pg. 1660, V6]	Letter from Budhil to PGCIL (copy to PTC, HVPNL, HPSEB, GOHP)	<ul style="list-style-type: none"> • However, seeing no progress in the BPTA and the consequent start of work by PGCIL towards the creation of onward evacuation infrastructure, Budhil agreed to bear the transmission charges till it becomes part of the regional system, as well as those corresponding to 12% free power of GOHP, only in expeditious interest of the project. 	
12 Sep 2007 [Ref: Pg. 1662, V6]	Letter from PGCIL to Budhil (based on CEA meeting)	<ul style="list-style-type: none"> • Budhil to lay direct tie-line from Budhil to Chamba pooling station • PGCIL to connect the NHPC's Chamera III HEP to Budhil's tie-line by way of LILO (line-in, line-out); 	<ul style="list-style-type: none"> • 220 kV, DC, single moose conductor;
18 Oct 2007 [Ref: Pg.	BPTA signed between	<ul style="list-style-type: none"> • Accordingly, Budhil signed the BPTA, confirming the conditions agreed to in its 	

1664, V6j	Budhil, PTC, PGCIL	letter dt. 29 Aug 2007, to ensure the development of the transmission system by PGCIL, before the commissioning of the Budhil plant.	
15 Jan 2008	Budhil application to Ministry of Power, Govt. of India, for section 68 approval.	<ul style="list-style-type: none"> • Due to the above frequent changes in the evacuation scheme, Budhil could approach the Ministry of Power, Government of India, for approval of the tie-line u/s 68 of the Electricity Act, 2003, only on 15th January 2008. • This was forwarded by the Ministry of Power to the CEA on 28 Jan 2008. 	
11 Feb 2008 [Ref: Pg. 1670, V6j]	CEA letter to MOP (copy to Budhil), for Section 68 approval	<ul style="list-style-type: none"> • CEA turned down the section 68 approval, stating that evacuation system has still not been finalized, and is likely to be finalised in the upcoming 16 Feb 2008 meeting. 	

16 Feb 2008 [Ref: Pg. 1677, V6]	23 rd Standing Committee meeting	<ul style="list-style-type: none"> PGCIL to lay 200 kV DC line with twin moose conductor from NHPC's Chamera III HEP to Chamba pooling station; Budhil to then connect this line, near NHPC's Chamera III HEP, by LILO. 	DC, twin moose
25 Feb 2008 and 23 June 2008 [Ref: Pg. 1691, V6]	Budhil reminder letters to CEA and Ministry of Power, for section 68 approval	<ul style="list-style-type: none"> Budhil stated that now that the evacuation system had been finalised, section 68 approval may be granted expeditiously. 	
27 June 2008 [Ref: Pg. 1692, V6]	Ministry of Power, section 68 approval	<ul style="list-style-type: none"> Finally, the Ministry of power granted approval u/s 68 of the Electricity Act 2003, for laying the 220 kV tie-line from Budhil to Chamera III HEP, to be LILO-ed into the Chamera III HEP to Chamba PSS line. 	<ul style="list-style-type: none"> Twin moose conductor

<p>21 Mar 2009 <i>[Ref: Pg. 1693, V6]</i></p>	<p>HPPTCL to Himachal Forest Dept.</p>	<p>HPPTC unilaterally altered the scheme again, as below:</p> <ul style="list-style-type: none"> • Interim arrangement: same as the 16 February 2008 Standing Committee meeting. • Final arrangement: when the Lahal polling station of HPPTCL is commissioned, Budhil will connect directly to Lahal s/s of HPPTCL. 	<ul style="list-style-type: none"> • 220 kV, but SC on DC towers. Zebra conductor. • 220 kV DC line (conductor not specified)
<p>17 June 2009 <i>[Ref: Pg. 1695 Relevant @ Pg. 1698, V6]</i></p>	<p>CEA meeting</p>	<ul style="list-style-type: none"> • Scheme to be the same as evolved on 16 Feb 2008; 	<ul style="list-style-type: none"> • SC on DC towers and Zebra conductor. Further, the towers should be such that they are able to carry the weight of high-capacity DC line

			(equivalent to twin moose)
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- Owing to the above changes in the evacuation scheme, the construction of the tie-line by the Appellant also got delayed.
- Further, after the finalization of the evacuation scheme, forest clearance was required, and the Appellant applied for the same immediately in July 2009 as soon as the evacuation scheme was finalized in June 2009. It is only after the said forest clearance was obtained in March 2010 [*Ref: Pg. 1702, V6*] that the work on the construction of the tie-line could be started by the Appellant which was completed by April 2012.
- However, the UERC after itself recording the above reason, wrongly proceeded to hold that the construction of the tie-line was a distinct activity and the same did not have any relation whatsoever with the construction of the plant of the Appellant. [*Ref: Para 4.3.2 (i) of impugned Order @ Pg. 127 of Vol-I of Appeal*]
- Thus, till April 2012 (*approx. 32 months*), the delay caused in the implementation of the project as a whole ought to have been considered as an uncontrollable parameter in terms of Regulations 3(33) (*@Pg. 234, V2*), 13(5) (*@Pg. 248, V2*) and 13(6) (*@Pg. 249, V2*) of the UERC Tariff Regulations, 2011. The same is also reflected

under Regulations 3(35), 12(5) and 12(6) of the UERC Tariff Regulations, 2015.

- As such, the cost overrun (IDC) on account of the same ought to have been allowed in terms of Regulation 14 (@ Pg. 250, V2) of the UERC Tariff Regulations, 2011, which is also reflected under Regulation 21(9)(b) of UERC Tariff Regulations, 2015 (@Pg. 603, V3).
- Pertinently, the pooling station of CTU at Chamera III was commissioned only on 01.11.2011, as such, even with a fully constructed plant, the Appellant would have incurred significant IDC to the project cost on account of its plant remaining idle.

B.Delay in construction of additional bay at NHPC Chamera III HEP

- The UERC failed to consider the delay in the construction of an additional bay at NHPC Chamera III HEP switchyard for the termination of the tie-line of the Appellant's project. *[Ref: Para 4.3.2(ii) of impugned Order @ Pg. 127, V1 of Appeal]*
- While passing the impugned Order, the UERC failed to take into account the following facts:
 - As per the CEA Meeting dated 13.11.2009, the Appellant was required to construct an additional bay at the GIS switchyard of NHPC Chamera III HEP. The said bay was required to be constructed by NHPC through an MoU.

- Vide its letter dated 03.02.2010, the Appellant requested for space and the draft MoU [*@ Pg. 1706, V-6*]. However, after repeated follow-ups with NHPC [*Ref: letters dated 18.06.2010 @ Pg. 1712 & 09.07.2020 @ Pg. 1713*], a draft MoU was shared by NHPC only in June 2010 [*@ Pg. 1705*] with a cost proposal of Rs. 21.17 Crores.
 - Vide letter dated 30.08.2010 [*@ Pg. 1714*], the above-stated cost was again revised to Rs. 5.36 Crores.
 - The said MoU was executed with NHPC only on 21.10.2010. [*Ref: Pg. 1716, Vol-6 of Appeal*]
 - After the conclusion of the scope of work, with NHPC, a purchase order and work order were placed by the Appellant on Areva for works at NHPC Chamera III HEP in February 2011 with a delivery period up to January 2012. [*Ref: Ann. 12 @ Pgs. 2469-2484, V9 of Appeal*]
 - The PGCIL system for evacuation of power from Budhil HEP was commissioned only in November 2011. [*Ref: Order dated 02.01.2013 passed by CERC at Ann.-16 @ Pg.4164, V 14 of Appeal*]
- The UERC's observation that the construction of the bay in the switchyard of NHPC Chamera III is an independent activity and not

dependent on the progress of either main power project-related works or the line work is erroneous, for the Commission was required to analyze whether the delay caused in construction of the additional Bay was within the control of the Appellant or not, and as such whether the Appellant was in a position to commission the project in time, in the event the said bay is not commissioned.

Absence of baseline PERT chart

- The UERC has also erroneously observed that in the absence of a baseline PERT chart, the time overrun on account of the implementation of additional bay work beyond the tie-line of the Project of the Appellant cannot be ascertained.
- The UERC ought to have considered the above reasons relating to the actions of NHPC in delaying the execution of the MoU which consequentially delayed the construction of the said additional bay.

C.Delay in execution of implementation agreement

- The UERC has erroneously held that the delay in the execution of the implementation agreement did not affect the overall delay in the implementation of the project. *[Ref: Para 4.3.2 (iii) of impugned Order @ Pg.128, V1 of Appeal]*
- Through the impugned Order, the UERC has observed that even if the signing of the Implementation Agreement on 22.11.2005, i.e., after a lapse of 6 months of execution of MoU has no relevance since the scheduled zero dates of start of construction post financial closure was March 2006 only, i.e., almost 2 years after the signing of Implementation Agreement.

- With regard to the above, the UERC failed to take into account the following noteworthy facts:
- By way of the MoU dated 23.09.2004 between the Appellant and GoHP, the following was agreed between the parties:
 - (a) As regards minimum discharge for the purpose of potable and irrigation water of the local people downstream of the dam, there was no specific condition. Accordingly, no specific number towards energy/ PLF loss was considered in the DPR or the original TEC dated 02.06.2005.
 - (b) The Appellant was supposed to build such infrastructural development works in the vicinity of the project area that may be essentially required for the benefit of the local population. The expenditure on such works had to be incurred by the Appellant to the tune of 0.25%-0.50% of the project cost.
 - However, subsequently vide a notification dated 16.07.2005, Deptt. of Pollution Control, GoHP, [*@ Pg. 1790 of Vol- VII*] made it mandatory for hydropower projects to release and maintain minimum flow downstream of the diversion structure at 10% of the minimum inflows observed in the lean season (“Minimum Environment Discharge”).
 - Thereafter, on 07.09.2005, the GoHP responded to the Appellant stating that higher LADA (1.50% of the project cost) and Minimum Environment Discharge are mandatory and pre-requisites to signing the Implementation Agreement.
 - On 09.09.2005 [*@ Pg. 1796 of Vol-VII*], the Appellant responded to GoHP strongly protesting against the aforesaid arbitrary conditions.

However, on the same day, the aforesaid minimum environment discharge was amended from 10% to 15%.

- However, the protest registered by the Appellant was not agreed to by the GoHP, and ultimately the Implementation Agreement was signed on 22.11.2005 [*@Pg. 1799 of Vol-VII*].
 - Around 6 months were lost between the issuance of Techno Economic Clearance (TEC) on 02.06.2005 and the eventual execution of the Implementation Agreement on 22.11.2005 due to a change in law qua the GoHP notifications on minimum environmental flow.
- The UERC ought to have taken the aforesaid facts (placed vide Reply dated 28.06.2016) into consideration in order to ascertain the reasons for the delay in execution of the Implementation Agreement.
- Further, UERC also failed to consider that the Appellant could only have commenced the civil works once after the financial closure of the project was completed after the execution of the Implementation Agreement.

D.Delay in grant of Forest Diversion Approval

- The UERC has erroneously observed that the delay in the grant of Forest Diversion Approval was within the control of the Appellant. [*Ref: Para 4.3.2(iv) of impugned Order @ Pg. 128 V1 of Appeal*]
- It is stated that delay in approval for forest grant could not have been assessed by the Appellant at the time of submission of DPR. In this regard, the following facts are noteworthy:

- Appellant submitted the application seeking permission for diversion of forest land as early as 04.08.2005, i.e., post approval of project DPR.
- On 07.06.2006 [*@ Pg. 1901 of Vol-VII*], the Appellant was granted Environmental Clearance by the Government of Himachal Pradesh
- On 19.04.2006 [*@ Pg. 1836 of Vol-VII*] the Appellant was granted diversion of 27.8358 hectares of land for construction of 70 MW Budhil HEP near village Kharamukh within the jurisdiction of Bharmour forest division, Dist. Chamba, Himachal Pradesh.
- However, the said permission was granted to the Appellant after 8.5 months.
- The above delay led to a consequential delay in the overall implementation of the Project.

E.Delay in widening of road from Chamba to Budhil Project Site

- The UERC has erroneously observed that the delay by the State Public Works Department (HP-PWD) was entirely attributable to the Appellant. Further, it has been observed that the Appellant itself had not made due follow-up with the concerned authority besides itself making delayed advance payments to the HP-PWD which the Appellant ought to have deposited in advance after the meeting dated 17.01.2006 and could be in a position to persuade the HP-PWD to expedite the work related to widening of the road resulting in timely arrival of the equipment and completion of the project related work.

[Ref: Para 4.3.2 (v) of impugned Order @ Pg. 129, V1 of Appeal]

- With regard to the above, it is stated that the UERC has failed to take into account the following:
- That as per the MoU dated 23.09.2004 executed between Appellant and GoHP, the HP-PWD was required to construct/ upgrade roads/ bridges as considered necessary for the Appellant's Project.
 - As such, the onus to widen the road was on the State of HP and any delays in such widening were beyond the control of the Appellant, and the cost impact on account of the said delays (**IDC**) ought to have been allowed by the Appellant. The Appellant vide letter dated 20.08.2009 [*@ 1916 of Vol-7*] informed the PWD-Bharmour Division of the said issue.
 - As per the Report prepared by CEA, it was categorically stated that the project work was held up on account of non-widening of the road by HP-PWD. [*Ref: A-13 @ Pg.3431, V12 of Appeal*]
- Further, Appellant had made all the timely payments which were required for the said purpose, and the details thereof were submitted by the Appellant vide its submission dated 28.06.2016 made to the UERC. [*Ref: A-12 @ Pg. 1915, V7 of Appeal*]

F. Delay on account of geological overbreaks

- The UERC through the impugned Order has wrongly held that the delay due to geological overbreak and increase in length of HRT was controllable as within the control of the Appellant. [*Ref: Para 4.3.2 (vi) of impugned Order @ Pg.131, V1 of Appeal*]

- Pertinently, the State Commission failed to delve into the reasons for the cost and time overrun consequent to the geological overbreaks and as such the unforeseen overbreaks ought to have been examined by the Commission.

- Toward this end, the State Commission failed to consider the following:
 - That the project suffered from geological surprises/ overbreaks since the tunnel excavation encountered severe overbreaks which could not have been reasonably anticipated during DPR or even the detailed engineering stage.
 - It is pertinent to mention herein that in the project of the Appellant, most of the water conductor system and powerhouse components are underground structures and hence were prone to geological uncertainties. The original DPR estimations could not have factored in the events which occurred subsequently during the implementation of the project which were beyond the control and contemplation of the said Appellant.
 - In terms of Regulations 3(33), 13(5) and 13(6), 14 and 23(3) of the UERC Tariff Regulations, 2011 and Regulations 3(33), 12(5), 12(6), 13 and 21(7) of UERC Tariff Regulations, 2015, the Appellant ought to have been allowed the adjustment in tariff owing to the occurrence of events beyond its control.
 - Appellant had also furnished a report of a CERC empanelled consultant who confirmed the incidence of the aforementioned geological overbreaks and the consequent cost overruns. The

complex nature of the geology surrounding the project was also clearly mentioned in chapter VII of the original DPR submitted before the Commission. *[Ref: A-12 @ Pg. 1415, V5 of Appeal]*

- As a result of the complex condition of the project site, geological overbreaks were inevitable and resulted in the requirement of additional 30,000 CUM of concrete for backfilling and concreting lining, in the HRT and De-silting tank, thereby leading to a cost escalation and as such the same is liable to be adjusted as part of the capital cost of the project.
- The Project lies in the western part of the Himalayan orogenic belt, affected by several tectonic features. Due to highly rugged and arduous nature of the terrain detailed geological investigations along the tunnel were not possible and cost effective, due to which the extent of geological problems could not be precisely anticipated. *[Detailed explanation @ Pg. 1231, V5 of Appeal]*

G. The State Commission has not taken into account that the projects of various developers got delayed on account of several factors, several of which are common to those as claimed by Appellant, viz. delay in grant of forest approval, cost incurred on account of construction of HRT, escalation in contract price, IDC and construction and financing charges. About the same, the Appellant has submitted the following documents:

- (i) Submissions dated 28.08.2016 made in respect of delay in execution of Implementation Agreement;
- (ii) CEA letter dated 05.09.2016 along with Monthly Construction Progress Report of the project from September 2008 w.r.t delays

faced by Appellant on account of geological surprises [*Ref: Pgs. 3351-3837, V-12 of Appeal*];

- (iii) Various minutes of Meetings of CEA in respect of delays in the creation of evacuation of infrastructure for the Project;
- (iv) Submissions of Appellant dated 05.03.2016 in respect of delay in construction of additional bay [*Ref: Pgs. 680-764 of Appeal*];
- (v) Submissions of Appellant dated 13.09.2016 in respect of delay in road widening [*Ref: Pgs. 3335-3342 of Appeal*]

Cost Overrun

A. Capital cost adjustment on account of hard civil and hydro-mechanical work

[Ref: Para 4.3.3 (A)(ii) of Impugned Order @ Pg. 133 V1 of Appeal]

- The UERC failed to consider the impact of time overrun on account of uncontrollable factors and the consequent impact on the contract prices negotiated by the Appellant with its contractors. Pertinently, any time overrun would obviously lead to a cost overrun as well.

- The State Commission failed to acknowledge that the escalation of Rs. 71.51 Crores in civil works was due to the following reasons:
 - Geological overbreaks, leading to cost escalation not envisaged in the DPR;
 - Price escalations due to delays not envisaged in DPR;
 - Increase in length of HRT from 6028 meters to 6265 meters;
 - Increase in the quantum of steel reinforcement for the Diversion dam.

- Further, the Commission failed to carry out a proper prudent analysis of the time overrun in the completion of the HRT and De-silting tank. In the absence of a PERT chart, the State Commission was required to carry out a prudent analysis of the time overrun based on information provided in the aforesaid chapter in the DPR and should have taken into consideration the material facts that the contract qua construction of HRT and desilting tank was awarded on 26.12.2005 and the date of completion of the said contract, as per Article 4 of the said contract, was 30.04.2008 [*Ref: Pg. 3085, V-11 of Appeal*]. This is evidence of the fact that the civil construction activity had been duly planned by the Appellant and the timelines for completion of the said civil work, was incorporated into the contract as well.
- Even though the contract had been awarded in December 2005, the actual civil work could be commenced only in May 2006, i.e., after a delay of 5 months, which delay was attributable to the State Government since the Appellant was awarded the forest diversion approval only on 19.04.2006 [*@ Pg. 1836 of V-7*]. The Appellant provided the said information in its reply dated 28.06.2016.
- The Appellant could not have commenced the construction on the project site until and unless the forest diversion approval was accorded. Thus, as soon as the approval was accorded in April 2006, the civil work construction commenced in May 2006.
- The State Commission also failed to consider other uncontrollable factors like geological surprises, local protests, an increase in the

length of HRT, delay in widening of the project road by HP-PWD, etc. leading to delays in scheduled project construction. Further, the observations of the State Commission are unreasonable and contrary to the face of record and evidence submitted before it. *[Detailed breakup of Civil and H&M works as per DPR @ Pg. 3311 to 3320 of Vol-12]*

➤ **Financial Impact**

- Appellant's Claim– Rs. 315.15 Crores *[Ref: Table 4.4@ Pg. 133, V1 of Appeal]*
- Allowed by the Commission- Rs. 243.63 Crores *[Ref: Table 4.6@ Pg. 135, V1]*
- Disallowance to the Appellant- **Rs. 71.52 Crores** **[@ Pg. 3321 of Vol-XIII]**

B. Disallowance qua soft cost on account of time overrun

[Ref: Para 4.3.3 B of Impugned Order @ Pg. 135, V1 of Appeal]

- The UERC has erroneously considered the soft cost only up to the scheduled COD of the Project. However, the State Commission has failed to take into account SCOD timeline is the best possible estimate for completion of the project at the planning stage. However, the actual completion is dependent upon several factors as elaborated by the Appellant herein above that have an adverse impact on the timeline of the Project.
- The State Commission has failed to acknowledge the possibility that the SCOD, as originally envisaged, is prone to hindrances/ issues which can lead to delays in the commissioning of the plant. The said approach is in stark violation of the mandate contained under Section 61(a) of the Electricity Act, 2003.

- As a result of the aforementioned time overrun, there has been an escalation in the time-dependent soft cost up to May 2012 i.e. the time when the project of the Appellant was commissioned.
- Notably, the State Commission has principally allowed actual soft costs incurred by the Appellant up to SCOD. However, the State Commission has failed to acknowledge and allow the increase in soft cost owing to delay (~32 months) due to factors beyond the control of the Appellant (as elucidated above).
- Financial Impact
 - Appellant's claim – Rs. 50.62 Crores [*Ref: Table 4.9@ Pg. 137, V1 of Appeal*]
 - Allowed by the Commission- Rs. 24.66 Crores [*Ref: Table 4.9@ Pg. 137, V1*]
 - Disallowance to the Appellant- **Rs. 25.96 Crores**

C. Disallowance qua increase in IDC on account of time overrun

- The State Commission has failed to allow the increased expenditures on account of IDC due to the abovementioned time overrun. While doing the same, it has been observed that since the time overrun beyond the SCOD is not being allowed, hence, considering that all the Capital Expenditures have been incurred till the SCOD, the IDC is being allowed on a prorated basis of the Capital Cost approved by the State Commission.

[Ref: Para 4.3.3 of impugned Order @ Pg. 137, V1 of Appeal]

- Towards this end, the Appellant's submissions are as follows:

- IDC is a function of 3 factors, - interest rate, amount of debt, and duration of construction period. It is submitted that the interest rate considered in the DPR (Chapter 14 therein) was 9%, whereas, the actual interest rate ranged from 10.4% to 14.5% during the last 4-5 years of the project construction period, which is the period when most of the loan accumulates and thus IDC accrues at a fast pace.
- The term loans were taken for the power project from a consortium of four banks (i.e., ICICI Bank, PNB, HUDCO, and IIFCL)
- Further, the IDC was kept reasonably under control due to significantly lower debt utilization than the regulatory norm of 70% of project cost. If the power project would have availed debt as per the norm, the debt would have been Rs. 685,37 Cr. * 70%= Rs. 480 Cr, instead of actual debt of Rs. 304.96 Cr., which would have led to much higher IDC (i.e., higher by about 78 Crores).
- Additionally, the change in the construction period resulted in an inevitable escalation in the project cost.
- Regulation 14 (@ Pg. 250, V2) of the UERC Tariff Regulations, 2011, which is also reflected under Regulation 21(9)(b) of UERC Tariff Regulations, 2015 (@Pg. 603, V3) provides the entitlement of Appellant to cost overrun/ IDC due to delay owing to uncontrollable factors/ force majeure events.

➤ Financial Impact

- Appellant's claim – Rs. 135.07 Crores [*Ref: Para 4.3.3.(B)@ Pg. 137, V1*]
- Allowed by the Commission- Rs. 59.79 Crores [*Ref: Table 4.10, Pg. 138, V1*]
- Disallowance to the Appellant- **Rs. 75.28 Crores**

D. Non-Submission of PERT Chart

[Ref: Para 4.3.2 (vi) of Impugned Order @ Pg. 131, V1 of Appeal]

- The State Commission has wrongly proceeded to determine the tariff of the Appellant observing that the PERT chart was material while analyzing the nature of delays caused in the project construction.
- The observations qua non-submission of the PERT chart along with the original DPR is erroneous since the same does not disentitle the Appellant from claiming escalation in capital cost as a result of delays on account of uncontrollable factors, and, the same has to be independently scrutinized by the State Commission subject to prudence check, in terms of Regulations 3(33), 13(5) and 13(6), 14 and 23(3) of the UERC Tariff Regulations, 2011.
- Notably, though the supply of power to R-2 commenced in 2015, the finalized PPA of the Appellant with the R-2 was executed in the year 2016 and, accordingly, the regulations, that are applicable for the determination of base year fixed cost are the UERC Tariff Regulations 2011. Further, the above provisions of the 2011 Regulations have also been incorporated as Regulations 3(35), 12(5), 12(6), 13 and 21(7) of the UERC Tariff Regulations, 2015.
- The UERC cannot at all absolve/ free itself from the responsibility of carrying out a prudence check on the reasons put forth by the Appellant concerning the various delays encountered during the implementation of the project. The said delays were on account of certain events that cannot be overlooked by simply observing that the PERT chart has not been provided along with the original DPR.

- Even in the absence of the PERT chart, the State Commission could have appreciated as to whether the delay caused as a result of specific event was uncontrollable or controllable. The only investigation which was required to be made by the State Commission was whether there was the occurrence of events that were beyond the control of the Appellant and whether the same required additional capital and thereafter, conduct a prudence check of the said cost.
- Furthermore, DPR was generally based on the standard timelines provided for the project construction for Hydro Developers with the Government of Himachal Pradesh. Detailed PERT charts are typically not provided as a part of the DPR. Further, the Appellant was unable to lay its hands on the detailed engineering charts, because of long-time lapse and change in senior project team members. *[Ref: PERT chart of the actual project timeline @ Pg. 3334 of V 13]*
- By making a threshold observation in para 4.3.2 of the impugned order that in the absence of a PERT chart the evaluation of time overrun cannot be done, it is clear that the State Commission did not apply its mind judiciously while analyzing the various aspects of delay enumerated in paras 4.3.2 (i) to (vii) of the said order. As such the Appellant is entitled to a revision in project cost due to time/ cost overrun on account of uncontrollable factors as enumerated in the grounds of the appeal.
- It is stated that the State Commission ought to have taken into account Chapter 11 of the original DPR, which suggested the timeline

for key activities of the project and the submissions of the Appellant ought to have been considered in light of the said Chapter 11. The submissions made by the Appellant demonstrate the delays encountered due to different factors in the project. Also, the extent of delay due to specific factors was provided in its submissions by the Appellant. *[Ref: Chapter-11 of DPR @ Pg. 1477, V-6of Appeal]*

52. In view of the above, it is thus prayed that the Impugned Order be set aside to the extent as prayed for in the captioned Appeal, in case, the present Appeal is allowed, then the same would result in a consequential increase in the Annual Fixed Cost of the Appellant, accordingly, the under-recovery over the past years need to be reimbursed with interest/ carrying cost.

Submissions of the UERC in Appeal No. 100 of 2017

Issue1- Computation of Design Energy

53. The State Commission submitted that the Appellant contends that Design Energy ought to have been considered after considering the reduced availability of water owing to the Himachal Pradesh State Pollution Control Board by way of notification dated 16.07.2005, as amended on 09.09.2005.

54. The State Commission has in Para 4.1 of the Impugned Order considered the reduced water availability owing to the Himachal Pradesh State Pollution Control Board notification dated 09.09.2005, issued under the Environment (Protection) Act, 1986, for the summer months but not for the monsoon months on the ground that even after taking into account the mandatory water discharge in terms of the amended Notification, there would be sufficient water to achieve the Design Energy.

55. It is clear that Design Energy is a mode of recovery of the Capital Cost by a generating Company, as in the present case.

56. Evidently, since the passing of the Impugned Order, the Appellant at no point in time has claimed and established that the water availability was inadequate.

57. The Appellant has also failed to approach the State Commission to seek correction in the “*design energy*” to be considered for the Project, despite being permitted under Regulation 54 of UERC (Terms and Conditions for Determination of Tariff) Regulations 2011, in this regard, it is submitted that the Appellant is making bald submissions that this argument raised by the State Commission is not relevant, whereas, the Appellant has failed to demonstrate what refrained the Appellant from approaching the State Commission for seeking correction in the Design Energy when the same would have been taken into consideration at the relevant stage.

58. In view thereof, it is submitted that considering the submissions made by the Appellant before the State Commission and applying the corrections as submitted hereinabove, the State Commission computed the Design Energy of the Project as 283.54 MUs against 280 MUs.

59. Accordingly, the contentions raised by the Appellant insofar as the computation of Design Energy is concerned, are unsustainable, devoid of merits, and hence are liable to be rejected by this Tribunal.

Issue2- Tie-line losses in the computation of Saleable Energy

60. Admittedly, the Appellant in the present appeal has submitted that the energy accounting for billing for power projects is done only at the point where the energy enters the grid, and that point is the PGCIL system in the present case.

61. In view thereof, the State Commission has rightly held that for the energy charge rate, the Appellant has derived saleable energy after deducting the tie-line losses also up to the delivery point of the beneficiary from ex-bus energy and free energy to the State.

62. However, by applicable Regulations, saleable energy is determined from the design energy, after deducting allowable normative auxiliary consumption as per the Regulations and free energy to the State, further, the deduction of energy in lieu of tie-line losses, as submitted by the Appellant, is not in accordance with the Regulations, hence, the same was not considered for the computation of saleable energy and corresponding energy charge rate.

63. It is further submitted that the Appellant *vide* its submission dated 29.05.2015 has claimed a total amount of Rs. 147.18 Crore for E&M works **including transmission lines** and submitted the contract agreements pertaining to the E&M work including transmission lines.

64. In this regard, it is submitted that on examination of the contracts, the total amount corresponding to the E&M works including transmission lines works out to Rs. 146.15 Crore, accordingly, the same was considered for the purpose of determination of tariff.

65. In view thereof, it is submitted that in a case, where the Appellant has claimed Capital Cost wherein the works related to that transmission lines were also included, at this stage, the Appellant cannot argue that any losses beyond the power plant ex-bus including tie-line losses are to the account of the beneficiary i.e. Respondent No. 2.

66. It is submitted that through the Impugned Order, the State Commission while deriving the saleable energy, has correctly disallowed the deduction towards tie-line losses up to the delivery point of the beneficiary from ex-bus energy and free energy to the State.

Issue3- Disallowance of Capital Cost of the Project

67. As far as the issue of disallowance of Capital Cost or time/cost overrun is concerned, where there are disputing questions of facts and there is a contesting party to defend against the Appellant's contention on facts, the State Commission is available to assist this Tribunal on any point where this Tribunal requires assistance.

68. Thus, it is submitted that the Impugned Order 30.11.2016 is self-explanatory and the State Commission determined the tariff for the Project by applying relevant regulations for the computation of Capital cost and design energy after prudence check of the time overrun and cost overrun which worked out to Rs. 3.81/unit for FY 2015-16 against the provisional tariff allowed for Rs. 4/unit.

69. The Respondent, UPCL has not filed any written submission in Appeal No. 100 of 2017, on being asked the learned advocate submitted that they are adopting the submissions of the State Commission.

Our Observations and Conclusion

Issue-1 Computation of Design Energy

70. The GoHP, Department of Pollution Control vide its notification dated 16.07.2005 mandates that all hydropower projects shall release and maintain

flow downstream of diversion structure at 10% of the minimum inflows observed in the lean season, further, vide notification dated 09.09.2005, increased the "Statutory Minimum Environment Flow" to 15%.

71. The relevant extract from the notification dated 09.09.2005 is reproduced as under:

*“In partial modification of this department’s notification of even number dated 16.07.2005 vide which directions in exercise of the powers conferred by the provisions of Section 5 of the Environment (Protection) Act, 1986 were issued, **the quantum of minimum flow of water to be released and maintained immediately downstream of the diversion structures of existing and upcoming hydel projects throughout the year should be read as threshold value of not less than 15% of the minimum inflow observed in the lean season; to the main river water body whose water is being harnessed by these project, ...”***

72. From a simple reading of the notification, it is clear that the Appellant is bound to release, at all times, a minimum of 15% of the inflow observed in the lean season and is also mandated to maintain the same at the “immediately downstream” of the diversion structures. It is to be mentioned that the reference of “**15% of the minimum inflow observed in the lean season**” in the above notification is to calculate the quantum of the flow to be maintained and it does not restrict the period of flow or mention anywhere that it is for lean season and not applicable for Monsoon period. It is an established jurisprudence that no new word or new meaning may be attached to a law.

73. Undisputedly, the above-said condition must be maintained throughout the year, irrespective of the season, whether lean season or monsoon season.

74. The State Commission argued that the GoHP notifications dated 16.07.2005 and 09.09.2005 mandated such conditions for the summer months and not for the monsoon months on the ground that even after taking into account the mandatory water discharge in terms of the amended Notification, there would be sufficient water to achieve the Design Energy, the relevant extract of the Impugned Order is quoted as under:

*“Further, the Commission has also noted that subsequent to the preparation of the DPR in February, 2005, Government of Himachal Pradesh vide its notification dated 16.07.2005 mandated for Hydro Power Projects to release and maintain minimum flow to downstream of the diversion structure at 10% of the minimum inflows observed in the lean season. Thereafter, vide notification dated 09.09.2005 the Department of Pollution Control, Government of Himachal Pradesh increased the "Statutory Minimum Environment Flow" to 15%. The Commission observed that the Petitioner has reduced the available discharge during the monsoon period also. **However, the same is incorrect since during the monsoon period discharge of water need not be required to be released from the Petitioner's HEP as there would be sufficient influx remain available during this period.** Considering the above submissions of the Petitioner and applying the corrections as discussed above the Commission has computed design energy of HEP as 283.54 MUs against 280 MUs consider by the Petitioner.”*

75. The State Commission has modified the GoHP notification by restricting the said notification to be applicable only for the non-monsoon period, which is not the mandate of the said notification, the State Commission has no such powers to amend or modify the statutory directions issued by the State Government under the applicable laws, such directions are mandatory and binding for all stakeholders.

76. We find no reason to accept such a contention of the State Commission, the notification rules the conditions throughout the year and not for specific seasons as contended/ interpreted by the State Commission.

77. We also decline to accept the contention of the State Commission that the Appellant at no point in time has claimed and established that the water availability was inadequate.

78. There is no reason cited for the Appellant to approach the State Commission till the Appellant is satisfied that the Design Energy is correct and the norms laid down by the Government under the laws are followed.

79. The Appellant submitted that as per the approved DPR, the minimum discharge during the lean season is 6.06 Cumecs, accordingly, the 15% statutory minimum environment flow is 0.91 Cumecs, therefore, the Appellant is mandated to release the statutory minimum environment flow of 0.91 cumecs throughout the year, including the monsoon period, the compliance can be affirmed from the publicly available data.

80. We are satisfied that the Appellant while complying with the above condition, has rightly considered the statutory minimum discharge of 15% (0.91 cusec) even in monsoon season while computing Design energy.

81. The Impugned Order passed by the State Commission is totally unjust and irrational, the same deserves to be set aside on this issue.

82. The Issue-1 is decided in favour of the Appellant.

Issue-2 Tie-line Losses

83. The Appellant contended that the generation tariff has to be determined based on the ex-bus supply of electricity, Regulation 3(35) of the UERC Tariff Regulations, 2011, and Regulation 3(37) of UERC Tariff Regulations, 2015 define Generation Tariff as under:

“tariff for ex-bus supply of electricity from a generating station.”

84. The Appellant also invited our attention to various regulations where the above-said definition is referred i.e. Regulations 3(22), 3(68), 49(3), 49(5), 50(3), 50(4) of UERC Tariff Regulations, 2015.

85. Further, Regulation 54(4) of UERC Tariff Regulations, 2011, while providing for computation and payment of Capacity Charge and Energy Charges for Hydro Generating Stations, *inter-alia*, provides as under:

“54. Computation and payment of Capacity Charges and Energy Charges for Hydro Generating Stations

(1) The annual Fixed Charges of Hydro Generating Station shall be computed on annual basis, based on the norms specified under these Regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and Energy Charge, which shall be payable by the beneficiaries in proportion to their respective share/

allocation in the saleable capacity of the generating station, that is to say, in the capacity excluding the free power to the home State.

...

(4) The Energy Charge shall be payable by every beneficiary for the total energy supplied to the beneficiary, during the calendar month, on ex-power plant basis, at the computed Energy Charge Rate. Total Energy Charge payable to the Generating Company for a month shall be:

(Energy Charge Rate in Rs./ kWh)x {Energy (ex-bus)} for the month in kWh} x (100-FEHS)/ 100”

86. The above provision also has been carried forward as Regulation 50(4) of UERC Tariff Regulations, 2015.

87. The sub-regulation (4) provides for the determination of Energy Charge on the basis of total energy supplied to the beneficiary.

88. Undisputedly, as seen from the aforementioned regulations, any losses beyond the power plant ex-bus i.e. in the transmission of electricity must be accounted for in the beneficiary account i.e. Respondent No.2.

89. On the contrary the UERC contended that the State Commission has rightly held that for the energy charge rate, the Appellant has derived saleable energy after deducting the tie-line losses also up to the delivery point of the beneficiary from ex-bus energy and free energy to the State.

90. Also argued that by applicable Regulations, saleable energy is determined from the design energy, after deducting allowable normative auxiliary consumption as per the Regulations and free energy to the State, further, the deduction of

energy in lieu of tie-line losses, as submitted by the Appellant, is not in accordance with the Regulations, hence, the same was not considered for the computation of saleable energy and corresponding energy charge rate.

91. This Tribunal vide common judgment dated 29.04.2013 passed in Appeal Nos. 63 of 2012, 66 of 2012, and 144 of 2012 settled the issue directing the distribution licensees to bear the tie line losses while computing tariff at the generation bus bar, relevant extracts are set out hereinbelow:

*“17.4 We find that the State Commission’s Regulations, 2008 do not deal with the issue of line losses from the generating station to the point of injection. We find that in the Central Commission’s Regulations, the point of inter-connection for biomass power plants is the line isolator on outgoing feeder on HV side of the generator transformer i.e. the energy sent out at the bus bars of the generating station. The auxiliary consumption considered in 2009 Regulations is 10% i.e. the same as decided by the State Commission. We find that the State Commission has not dealt with the issue of line losses properly. Just because the duties of the generating company under Section 10 of the 2003 Act includes establishment, operation and maintenance of the dedicated transmission line; the transmission loss on the dedicated transmission line could not be ignored in determination of the tariff. **If the energy delivered at the sub-station of the distribution licensee is considered for payment, the line loss on the dedicated transmission line has to be included in the tariff. Alternatively, the energy sent out at the bus bars of the generator could be considered for payment.** The impugned order does not indicate if the transmission loss on the dedicated line has*

been included in the norm for auxiliary consumption allowed by the State Commission.

17.5 We feel that the State Commission should re-consider the issue regarding accounting for the line losses on the transmission line connecting the biomass generating station to the licensees' system. Alternatively, the State Commission could consider the sent out at the bus bars of the biomass generators which are selling power to the distribution licensee into consideration for payment. Accordingly, we remand the matter to the State Commission to reconsider this issue."

92. In the light of the above judgment of this Tribunal, we find the contention of the State Commission as unsatisfactory and devoid of any justification.

93. It is important to note that two paras of a tariff Regulations cannot be read in isolation, the tariff regulation 2011 as quoted above, regulation 54(1) mentions "saleable Capacity" and regulation 54(4) mentions energy at Ex-bus of the power plant.

94. These two provisions need to be read in harmony, for a hydro station after considering transformation loss at generator GT and Free power, it must be seen where the energy is being scheduled if the energy is being scheduled at Ex-bus i.e. on the secondary side saleable energy would be calculated at that point and if power is being scheduled after tie line as in instant case power is being scheduled at Interstate transmission point i.e. PGCIL pooling substation at Chamera, the saleable energy should be computed at that point, otherwise it will be erroneous because the energy lost in tie line from generating station to pooling station can never be physically available for "sale" hence cannot be counted as saleable energy.

95. As pointed out in para 17.5 of the earlier judgment of this Tribunal dated 29.04.2013 passed in Appeal Nos. 63 of 2012, 66 of 2012, and 144 of 2012, either the issue of tie line losses should be reconsidered or energy at the Ex-bus of generator should be considered for payment.

96. In the present case as both Uttarakhand and HP are drawing power from the Chamera pooling station, the tie line losses should not be considered as part of saleable energy, i.e. while calculating Saleable energy, it will be deducted to arrive at saleable energy at ISTS metering point and as payment of energy is being made on energy scheduled at ISTS metering point, thus it will harmonise the provision in regards to both Saleable energy and scheduled energy.

97. The tariff design for the Hydro station as per UERC tariff regulation is that ultimately it is the total Annual AFC as approved by the commission is to be paid to the generator by dividing that into 50% fixed cost and 50% Energy charges.

98. The claim of GBHPPL on tie line losses is based on its own estimate which needs prudence check by the Commission based on actual line losses, hence the Commission is directed to re-calculate the claim of the GBHPPL as per the above observation regarding saleable energy afresh, after deducting the allowable normative auxiliary consumption as per the Regulations plus the free energy to the State and the tie line losses.

99. The Issue 2 is, thus, decided in favour of the GBHPPL.

Issue-3 Disallowance of Capital Cost

100. The State Commission submitted that there are disputing questions of facts and there is a contesting party to defend against the Appellant's contention on

facts, the State Commission is available to assist this Tribunal on any point where this Tribunal requires assistance, further, the Impugned Order 30.11.2016 is self-explanatory and the State Commission determined the tariff for the Project by applying relevant regulations for the computation of Capital cost and design energy after prudence check of the time overrun and cost overrun which worked out to Rs. 3.81/unit for FY 2015-16 against the provisional tariff allowed for Rs. 4/unit.

101. The Appellant's detailed submissions are noted in the preceding paragraphs.

102. From the Impugned Order, the State Commission has noted that as per audited financial statements for FY 2012-13 (the financial year in which the Project was commissioned), the Gross Fixed Assets as of 31st March 2013 were Rs. 686.41 Crore, however, for tariff determination, the Petitioner claimed a capital cost of Rs. 685.37 Crore, being the project cost capitalized as on the date of commissioning, i.e., 30th May 2012, additionally, the Petitioner submitted that as per the Techno-Economic Clearance dated 20.8.2010, the Directorate of Energy, Government of Himachal Pradesh (GoHP) had approved the revised cost of the project at Rs. 688.77 Crores.

103. It is seen from the submissions of the Appellant that the State Commission has disallowed various time overruns and consequential cost overruns on the following counts:

- i. Delay of 4 years (June 2005 to June 2009) and frequent changes in the finalization of the evacuation scheme by Government authorities;
- ii. Delay of 2.5 years (June 2009 to November 2011) by PGCIL and NHPC in commissioning of onward evacuation system; and

- iii. Time taken (November 2011 to May 2012) in the construction of the Budhil tie-line and commissioning.

104. The GBHPPL also raised certain factors resulting in time overruns, however, it is seen that the effect of delays because of such factors runs concurrent to the above factors, including delay in signing the Implementation Agreement, Forest Clearance, geological overbrakes (surprises), etc.

105. The summary of activities which affected the commissioning period is given below:

Greenko Budhil Events:

	Reason of delay	START DATE	END DATE
1.	IA with Himachal	June,2005	Nov., 2005
2.	Finalization of the Evacuation system	June,2005	June,2009
3.	PGCIL & NHPC delay in implementation of Evacuation system and bay	June,2009	November, 2011
4	Forest clearance	August, 2005	April, 2006
5	Budhil Chamera Dedicated line	November, 2011	May, 2012
6.	Road by HP PWD	Jan., 2007	Dec,2010
7.	Geological surprises	Continued during project	

Detail description of main events and decision:

A. IA with Himachal Pradesh Government:

106. The GBHPPL also submitted that around 6 months were lost between the issuance of Techno-Economic Clearance on 02.06.2005 and the execution of the Implementation Agreement on 22.11.2005 due to a change in law qua the GoHP notifications on minimum environmental flow, the GBHPPL could only have commenced the civil works once after the financial closure of the project was completed pursuant to execution of the Implementation Agreement.

107. The State Commission ought to have considered the facts to ascertain the reasons for the delay in signing the Implementation Agreement, however, the State Commission ruled that the delay was attributable to the GBHPPL.

108. It is a settled principle of law that any delay by Government authorities should not be placed on account of the affected party.

109. As mentioned by the GBHPPL, due to multiple changes in the provisions of environment flow norms, the Implementation agreement got delayed, the delay due to this issue is subsumed in the evacuation system, hence no separate decision is required on this issue.

B. Item no. (2) & (3) Delay in evacuation system by other agencies:

110. The factual matrix as submitted and noted in the previous paragraphs is again reproduced hereunder for clarity:

Date	Event	Evacuation Scheme	Line specification
6 June 2005	CEA meeting	<ul style="list-style-type: none"> • Minutes noted that Budhil had already applied for a Long-term Arrangement (LTA) with PGCIL. • Budhil to lay direct tie-line from Budhil to Chamba pooling station (near Chamera II HEP of NHPC); • Then, PGCIL to lay a line from the Chamba pooling station to Chamera II; 	<ul style="list-style-type: none"> • 220 kV; • 400 kV;
22 Sep 2006	PGCIL Meeting minutes	<ul style="list-style-type: none"> • Budhil to lay a direct tie-line from Budhil to Chamba pooling station. • Wrt transmission charge of the free power quantum (Govt. of Himachal Pradesh's entitlement), PGCIL stated that PGCIL suggested that it shall implement the evacuation infrastructure for the project only when BPTA is signed for recovery of the entire transmission charges including for free power corresponding to Himachal Pradesh, and accordingly, Budhil and HPSEB were asked to discuss amongst themselves, and to revert with a decision within 10 days; 	220 kV, DC line, single moose conductor
24 Nov 2006	PGCIL Meeting minutes	<ul style="list-style-type: none"> • It was suggested that since Budhil would be the first power project to come up in the Ravi basin, the transmission charges of the PGCIL system, till it becomes part of the regional system (that is, till Chamera III HEP gets commissioned), should be borne by PTC/ Budhil, and accordingly, the BPTA (Bulk Power Transmission Agreement) should be signed. • The matter could not be concluded. 	

4 Aug 2007	Letter from Budhil to PTC (copy to PGCIL)	<ul style="list-style-type: none"> Budhil stated that Budhil cannot be expected to bear the transmission charges corresponding to 12% free power as it belongs to GOHP/ HPSEB and urged PTC to redraft the BPTA accordingly. 	
23 and 24 Aug 2007	Meeting with PGCIL and letter to PTC	<ul style="list-style-type: none"> Further, Budhil held a meeting with PGCIL and followed up with a letter the next day, requesting PTC to confirm the bearing of transmission charges for the system preponed by the beneficiary of power, so that PGCIL may construct the transmission system immediately. 	
29 Aug 2007	Letter from Budhil to PGCIL	<ul style="list-style-type: none"> However, seeing no progress in the BPTA and the consequent start of work by PGCIL towards the creation of onward evacuation infrastructure, Budhil agreed to bear the transmission charges till it becomes part of the regional system, as well as those corresponding to 12% free power of GOHP, only in expeditious interest of the project. 	
12 Sep 2007	Letter from PGCIL to Budhil (based on CEA meeting)	<ul style="list-style-type: none"> Budhil to lay direct tie-line from Budhil to Chamba pooling station PGCIL to connect the NHPC's Chamera III HEP to Budhil's tie-line by way of LILO (line-in, line-out); 	<ul style="list-style-type: none"> 220 kV, DC, single moose conductor;
18 Oct 2007	BPTA signed between Budhil, PTC, PGCIL	<ul style="list-style-type: none"> Accordingly, Budhil signed the BPTA, confirming the conditions agreed to in its letter dt. 29 Aug 2007, to ensure the development of the transmission system by PGCIL, before the commissioning of the Budhil plant. 	
15 Jan 2008	Budhil application	<ul style="list-style-type: none"> Due to the above frequent changes in the evacuation scheme, Budhil could approach 	

	to Ministry of Power, Govt. of India, for section 68 approval.	<p>the Ministry of Power, Government of India, for approval of the tie-line u/s 68 of the Electricity Act, 2003, only on 15th January 2008.</p> <ul style="list-style-type: none"> This was forwarded by the Ministry of Power to the CEA on 28 Jan 2008. 	
11 Feb 2008	CEA letter to MOP for Section 68 approval	<ul style="list-style-type: none"> CEA turned down the section 68 approval, stating that evacuation system has still not been finalized, and is likely to be finalised in the upcoming 16 Feb 2008 meeting. 	
16 Feb 2008	23 rd Standing Committee meeting	<ul style="list-style-type: none"> PGCIL to lay 200 kV DC line with twin moose conductor from NHPC's Chamera III HEP to Chamba pooling station; Budhil to then conduct this line, near NHPC's Chamera III HEP, by LILO. 	DC, twin moose
25 Feb 2008 and 23 June 2008	Budhil reminder letters to CEA and Ministry of Power, for section 68 approval	<ul style="list-style-type: none"> Budhil stated that now that the evacuation system had been finalised, section 68 approval may be granted expeditiously. 	
27 June 2008	Ministry of Power, section 68 approval	<ul style="list-style-type: none"> Finally, the Ministry of power granted approval u/s 68 of the Electricity Act 2003, for laying the 220 kV tie-line from Budhil to Chamera III HEP, to be LILO-ed into the Chamera III HEP to Chamba PSS line. 	• Twin moose conductor
21 Mar 2009	HPPTCL to Himachal Forest Dept.	<p>HPPTC unilaterally altered the scheme again, as below:</p> <ul style="list-style-type: none"> Interim arrangement: same as the 16 February 2008 Standing Committee meeting. 	• 220 kV, but SC on DC towers. Zebra conductor.

		<ul style="list-style-type: none"> Final arrangement: when the Lahal polling station of HPPTCL is commissioned, Budhil will connect directly to Lahal s/s of HPPTCL. 	<ul style="list-style-type: none"> 220 kV DC line (conductor not specified)
17 June 2009	CEA meeting	<ul style="list-style-type: none"> Scheme to be the same as evolved on 16 Feb 2008; 	<ul style="list-style-type: none"> SC on DC towers and Zebra conductor. Further, the towers should be such that they are able to carry the weight of high-capacity DC line (equivalent to twin moose)

111. In the instant case, the location of the termination point was changed multiple times by the Central and the State agencies, additionally, the configuration of conductors and towers of dedicated lines was also altered on the instruction of the Central and the State agencies which affected the timelines.

112. Undisputedly, the evacuation system is a necessary and important requirement for any generation project, and in case the above-listed delays are beyond the control of the Appellant, we find no reason to delve further into the other factors as far as delay is concerned.

113. The evacuation scheme, as mentioned by the GBHPPL, was developed for eight hydro projects to be commissioned during the same period, and as such the planning of the scheme was taken up at the highest level involving the

statutory authorities like Central Electricity Authority, Central Transmission Utilities, and other important stakeholders including government authorities.

114. The GBHPPL submitted that for the evacuation of power from the above generation projects, the scheme envisaged 3 pooling sub-stations, one by PGCIL (near Chamera III station of NHPC) and two by HPPTCL (Lahal and Karian).

115. As such, it was important that the Project must be constructed within a timeline matching the construction schedule of the finalized evacuation system, which was finalized only in 2009.

116. The State Commission vide the Impugned Order or through submissions before us has not countered the facts submitted by the GBHPPL, as seen from there, there were frequent changes in the evacuation scheme and delays in finalizing the scheme.

117. It can be seen from there that the evacuation scheme was finalized only on 17.06.2009, therefore, even if the generation project had been commissioned before the commissioning of the evacuation transmission system, the generation project would have remained non-operative.

118. Further, we agree with the submissions of the GBHPPL that the forest clearance and then construction of the tie-line was dependent on the scheme finalization and had to be commissioned only subsequently.

119. All three factors are sequential and the components therein have to be commissioned in the sequence, i.e. i) finalization of the scheme, ii)

commissioning of the evacuation scheme along with commissioning of bays at NHPC HEP, and iii) the construction of the tie-line.

120. The State Commission vide the Impugned Order has held as under:

“4.3.2-----In order to analyse impact of individual activity on the overall delay in execution of project, the Commission asked the Petitioner for submission of Pert Chart (Base line as well as, CPM, and actual completion schedule) in respect. of the project depicting all the major activities and milestones. In response, Petitioner submitted that the DPR was generally based on the standard timeframe provided for construction of Hydro Projects and detailed Pert Charts are typically not provided as a part of DPR. However, the Petitioner submitted the Pert Chart based on the actual timelines of the activities/milestones achieved. As stated by the Petitioner, since the aforesaid Pert Chart was not being prepared during the construction of the project, it has now been prepared by the Petitioner based on its annual accounts and reports procured from CEA. It is well known fact in the field of construction and commissioning of any project, the Pert Chart is a very useful technique for monitoring the actual progress of the project vis-a-vis scheduled programme besides it helping determination of expected project completion time giving probability of completion before the schedule dates. The Commission wonders as to why such an important chart was not being prepared at that point of time and in the absence of the, same how evaluation of time overrun could be decided. Admittedly, from Petitioner's submission it is apparent that, somehow they missed the seriousness towards planning as well as

necessary monitoring during the development/ implementation stages of the project. However, the Petitioner's submissions on time overrun in its various replies have been discussed in following paragraphs:

i) Delays due to frequent changes in finalization of evacuation scheme for Budhil

The Petitioner submitted that project execution was significantly delayed due to the frequent changes in the evacuation scheme by the Central Electricity Authority ("CEA"), Power-grid Corporation of India Ltd. ("PGCIL"), the Government of Himachal Pradesh, and Himachal Pradesh Power Transmission Corporation Ltd ("HPPTCL") which is the State Transmission Utility of Himachal Pradesh. Due to the complexity of developing the scheme, there were as many as 5 changes during the period of 4 years between June 2005 and June 2009. Due to frequent changes in the evacuation scheme, the Petitioner could approach the MoP for approval of the tie-line u/s 68 of the Electricity Act, 2003 in February, 2008 which was granted in June 2008. The scheme was finalised in June 2009 and the Petitioner applied for Forest clearance in July, 2009 and the approval for the same granted in March, 2010. The work for tie-line started after the approval and the same could be completed in April, 2012.

The Commission noted that the evacuation Scheme of the Budhil HEP was decided in the 23rd Standing Committee meeting held on 16.02.2008 which was approved by MoP on 27.06.2008 u/s 68 of the Electricity Act, 2003, for laying the 220 kV tie-line from Budhil to Chamera III HEP, LILO of the same was to be carried into the Chamera III HEP to Chamba PSS line. Further, in March, 2009 HPPTCL

considered the above referred Scheme as an interim arrangement, however, the same was again confirmed by CEA on 17.06.2009. From the Pert Chart submitted by the Petitioner it has been observed that the work for the tie-line was started from April, 2010. However, in the absence of baseline Pert Chart it cannot be said about actual time overrun in implementation of tie-line related work. Moreover, construction of evacuation line is an independent activity, in no way it is dependent on the progress of the main power project related works which are two distinct activities in terms of scope and location. Accordingly, the Commission is of the opinion that delay on this account is due to the reasons attributable to the generator.”

121. From the above, it is seen that the State Commission without examining the facts placed before it, as reiterated before us and without carrying out a prudence check, has rejected the time overrun only citing that the GBHPPL has not maintained the “PERT Chart” and the construction of the tie line is a distinct activity from that of the generation project.

122. As mentioned above, there is no need to refer to the PERT Chart to examine and decide on such delays, which are certainly beyond the control of the GBHPPL.

123. The evacuation system can be commissioned only after the planning and finalization of the scheme, and after the evacuation scheme including the bay is ready, the tie line can be completed for connecting the generating station to the evacuation transmission system.

124. In case there is a significant delay in the finalization of the scheme and commissioning of the evacuation system, the generation project, even if the project is commissioned, it will remain idle resulting in to financial loss.

125. Undisputedly, the scheme was finalized in June 2009 and the CTU's transmission system as part of the evacuation system was commissioned in November 2011.

126. It has been submitted by the Appellant that there is no denial to the fact that neither the Budhil HEP nor the Chamera-III HEP of NHPC Limited nor the transmission system could achieve COD as scheduled, the Budhil HEP was commissioned in two phases on 25.05.2012, the Chamera-III HEP of was commissioned in June 2012, whereas, the transmission system was put to commercial operation on 01.11.2011.

127. In the CEA meeting dated 13.11.2009, the GBHPPL was instructed to construct an additional bay and GIS switchyard at NHPC Chamera III, for which space was required at the NHPC Chamera III HEP, further, the GBHPPL was instructed to carry out the work of bay construction only through NHPC.

128. Immediately, thereafter, the GBHPPL requested NHPC vide letter dated 03.02.2010 for the space and the draft MoU.

129. The NHPC signed the MoU for the construction of the required "Bay" at its HEP only on 21.10.2010 after revising and finalizing the cost estimates on 30.08.2010, the delay in signing the MoU was beyond the control of GBHPPL.

130. The evacuation transmission system was built and commissioned only on 01.11.2011 with a delay.

131. The NHPC's project was delayed, which inter-alia, also included the construction of the bay in the switchyard, it is, thus established that such delay was beyond the control of the Appellant.

132. Subsequently, the GBHPPL constructed the tie-line which the State Commission should have examined under the relevant benchmarks.

133. It cannot be denied that the Generation Project of the GBHPPL was commissioned within the period by which the tie-line was commissioned.

134. The time taken by Government authorities to finalize the evacuation scheme, delay in forest clearance, finalization of cost estimates for the construction of Bay, and signing of MoU by NHPC has resulted in delays in the construction of the project.

135. We agree with the submission of the GBHPPL that the pooling station of CTU at Chamera III was commissioned only on 01.11.2011, as such, even with a fully constructed plant, the GBHPPL would have incurred significant increase in IDC to the project cost on account of its plant remaining idle.

136. The GBHPPL also submitted that in Para 4.3.2 of the Impugned Order, the State Commission has wrongly considered SCOD as 42 months as the implementation period of the Project, however, as per Chapter 1 and other

chapters of the DPR, it is 54 months, thus, the same is an error apparent and goes to the root of the present appeal.

137. These activities affected the generation station and dedicated line construction. For a generating plant, the evacuation system and construction of plants are not mutually exclusive, the location of the terminal bay at the pooling station would affect the internal configuration of the plant as the location of the Generator transformer would be decided by that.

138. In addition to this in multiple orders of the Central Commission and this Tribunal's judgment, it has been held that the commissioning schedule of the generating plant should match the evacuation system commissioning schedule to avoid the condition of the bottleneck of either the generation or the evacuation system, which ultimately affects the cost of power for the consumer, and, therefore, to avoid mismatch in transmission and generation and their construction activities, continuous monitoring and coordination by government authorities is done.

139. Hence, for any delays in the commissioning of the evacuation system, the generating company should not be held responsible for, a necessary prudence check must be done by the Commission by considering this.

C. Issue (4) Forest Clearance:

140. The State Commission also erred in deciding, against the GBHPPL, the issue regarding the delay in forest clearance by observing as under:

“---The Commission is of the view that Govt. of H.P. has a system to provide requisite clearances in a time bound manner through a single window mechanism and the procedures are thereof have been laid down to facilitate the project developers. Further, being a project developer all such procedure and formalities related to Government authorities should have been duly considered at the time of preparation of DPR by the Petitioner. Accordingly, the Commission is of the opinion that delay on this account is due to the reasons attributable to the generator.”

141. The merit of the issue and whether there is a delay in accord with forest clearance must have been ascertained on facts submitted by the GBHPPL.

142. The GBHPPL submitted that at the time of the DPR preparation, the type of land was not well known, thus estimating the requirement as 38 Ha. Private land and 24 Ha. Government/ Private land, however, at the time of actual execution of the Project, a vast majority of the land was found to be forest land i.e., 62.08 Ha. out of ~ 64 Ha. for the main plant plus tie line to Chamera III HEP.

143. The GBHPPL placed detailed reasoning which otherwise should have been examined by the State Commission, the delay cannot be attributed to the GBHPPL.

144. The GBHPPL submitted that the process was time-consuming as it required the involvement of multiple agencies such as State Forest Department offices, the Ministry of Environment & Forest, the Government of India, and other activities such as scope fixation, rate fixation, and payments, therefore, the Appellant

applied for diversion of forest land for the main plant on 04.08.2005, however, the Environmental Clearance was granted by the Government of Himachal Pradesh on 07.06.2006.

145. Further, submitted that finally, the diversion of 27.8358 hectares of land for the construction of 70 MW Budhil HEP near village Kharamukh within the jurisdiction of Bharmour forest division, Dist. Chamba, Himachal Pradesh was granted on 19.04.2006.

146. Such delays, resulting in consequential delays in the implementation of the Project, cannot be attributed to the GBHPPL. However as per discussion above regarding evacuation system the period of delay in forest clearance is subsumed in the delay of the evacuation system, so no separate decision is required on this.

D. Issue (5) Dedicated line between Budhil – Chamera:

147. As this line was completed within six months of the completion of the evacuation system by POWERGRID and bay at Chamera by NHPC hence there is no inordinate delay in the commissioning of the line.

E. Issue (6) Delay in construction of Road by Himachal Pradesh PWD

148. The submission of GBHPPL is reproduced below:

- *The UERC has erroneously observed that the delay by the State Public Works Department (HP-PWD) was entirely attributable to the Appellant. Further, it has been observed that the Appellant itself had not made due follow-up with the concerned authority besides itself making delayed advance payments to the HP-PWD which the Appellant ought to have deposited in advance after the*

meeting dated 17.01.2006 and could be in a position to persuade the HP-PWD to expedite the work related to widening of the road resulting in timely arrival of the equipment and completion of the project related work.

- *With regard to the above, it is stated that the UERC has failed to take into account the following:*
 - *That as per the MoU dated 23.09.2004 executed between Appellant and GoHP, the HP-PWD was required to construct/ upgrade roads/ bridges as considered necessary for the Appellant's Project.*
 - *As such, the onus to widen the road was on the State of HP and any delays in such widening were beyond the control of the Appellant, and the cost impact on account of the said delays (IDC) ought to have been allowed by the Appellant. The Appellant vide letter dated 20.08.2009 informed the PWD-Bharmour Division of the said issue.*
 - *As per the Report prepared by CEA, it was categorically stated that the project work was held up on account of non-widening of the road by HP-PWD.*
- *Further, Appellant had made all the timely payments which were required for the said purpose, and the details thereof were submitted by the Appellant vide its submission dated 28.06.2016 made to the UERC.*

149. It is observed from above that widening of the road from Chamera to Budhil was to be executed by government agency of Himachal Pradesh and GBHPPL

made timely payment, the widening of road from Chamera to Budhil is most crucial component of project execution for movement of heavy machinery, as in case of transmission, for this delay government agency is responsible, hence GBHPPL cannot be held responsible for this delay.

F. Issue (7) Geographical Surprises or outbreak:

150. The State Commission held that the delay due to geological overbrakes and the increase in length of HRT was within the control of the GBHPPL, relevant extracts of the Impugned Order are reproduced hereunder:

“Since the baseline Pert Chart were not prepared by the Petitioner beforehand i.e. prior to start of project development & construction activity, so as to arrive at the prudence analysis of time overrun in completion of HRT and De-silting tank related works the Commission has examined the contract agreement no. LGPPL/LITL/CIVL/002 dated 26.12.2005 executed with civil contractor namely, M/s Lanco Infratech Ltd. The scope of work stipulated under the aforesaid contract was major civil related works such as Coffe & Concrete Gravity Dam, Intake structure, Feeder Tunnel, Desilting Chamber, Head Race Tunnels (HRT), Surge Shaft and Pressure Shaft etc. The Article 4 of the Contract provided the timeline of completion of all the works latest by 30.04.2008 and date of start of works was from the date of contract. From the implementation Chart (proposed after actual execution of activities) submitted by the Petitioner it has been observed that all the major civil work were actually initiated from the month of May, 2006, i.e. with a delay of 5 months as provided in the Contract. The work of HRT, in accordance with the Pert Chart submitted by the Petitioner, got completed in November, 2011 whereas scheduled date

of commissioning of the HEP was September, 2009. The Petitioner has submitted that due to geological overbreaks and other geological obstacles length of the HRT got increased from 6.028 meters to 6265 meters. The Commission taken note of the fact that there was an increase in length of HRT by 237 metres only. However, delay in completion of HRT related works by more than 42 months cannot be accepted on account of merely 237 meters increase in HRT length. More so, when the entire HEP itself was planned to be constructed in the same time duration.

Accordingly, the Commission is of the opinion that delay on this account due to the reasons attributable to the generator.”

151. The State Commission decided the matter against the GBHPPL without going into the merit of the case, the period of delay should have been ascertained based on data and facts placed before it.

152. It cannot be disputed that the Project lies in the western part of the Himalayan organic belt affected by several tectonic features, as such, the area around the Project is highly tectonised giving rise to crushed rock mass, gougy material, Blocky crumbly and sheared rock.

153. The GBHPPL submitted that the Main Central thrust (i.e., a major geological fault where the Indian Plate is pushed under the Eurasian plate along the Himalayas) is hardly 40 KMs northeast of the project line, further, due to the highly rugged and arduous nature of the terrain, detailed geological investigations along the tunnel were not possible and cost-effective, to the resultant information, the tunneling media, in various locations was heavily jointed, low Rock Quality Designation and had parallel to sub-parallel joints to the tunnel alignment, further,

the presence of water bodies above tunnel crown led to extensive geological breaks and hence slowed down the progress of excavation.

154. The GBHPPL also submitted that adverse geology further affected the progress of work in most of the underground structures due to occasional stoppages, slow progress, and extra time for completing these extra works, since most of the water conductor system and powerhouse components were underground structures, they were prone to geological uncertainties.

155. The GBHPPL also claimed that in terms of Regulations 3(33), 13(5) and 13(6), 14 and 23(3) of the UERC Tariff Regulations, 2011 and Regulations 3(33), 12(5), 12(6), 13 and 21(7) of UERC Tariff Regulations, 2015, the GBHPPL ought to have been allowed the adjustment in tariff owing to occurrence of events beyond its control.

156. We have also taken note of the Commission's order regarding the denial of time overrun due to non-submission of the PERT chart, it is observed that neither the Tariff Regulations 2011 nor the Tariff Regulations 2015 has mentioned the requirement of submission of the PERT Chart and Regulation 23(3) clearly mentioned the process of prudence check of Capital cost.

“Provided that prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time;

Provided further that in cases where benchmark norms have not been published, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and

*time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff;
Provided also that the Commission may issue guidelines for vetting of capital cost of projects by independent agency or expert and in that event the capital cost as vetted by such agency or expert may be considered by the Commission while determining the tariff.”*

157. If a process is elaborated in Regulations, then it is a settled position of law that it must be followed, simply because a PERT chart is not available, the claim of the GBHPPL cannot be denied instead it requires that only after prudence check it should be allowed or disallowed by the Commission.

158. The report of an external expert, who is on the panel of experts for capital cost *inter-alia* empaneled by the Central Commission has not been given due consideration, Regulation 23(3) of tariff Regulations explicitly mentioned that the Commission can take a view of experts.

159. We agree with the submissions of the GBHPPL, such delays are beyond the control of the GBHPPL, therefore, the appeal has merit and deserves to be allowed on this count.

160. Reliance is placed on the Judgment dated 12.11.2014 of this Tribunal in Appeal No. 30 of 2014 & Appeal No. 35 of 2014, titled **Everest Power Pvt. Ltd. v. PERC & Ors. (para 63)**, the relevant extract is quoted as follows:

“We find that the State Commission has allowed cost and time over run due to geological surprises during construction of Dam due to actual level of foundation rock lower than the anticipatory level and geological conditions during the construction of dam, HRT, pressure shaft and power house complex were poorer as compared to what was

envisaged in the DPR. The State Commission has, thus allowed additional cost incurred for geological surprises/conditions of the project as per the recommendations of the Consultant up to the synchronization of the project. We do not find any infirmity in the same.”

161. This Tribunal in the above-noted judgment has affirmed the order passed by the State Commission in allowing cost and time overrun due to geological surprises during construction.

162. The State Commission in the Impugned Order, as noted above, has disallowed the time extension stating that the extended time taken in completion of HRT-related works is more than 42 months which is equivalent to the completion period specified for the entire project, the relevant extract is again reproduced as under:

“However, delay in completion of HRT related works by more than 42 months cannot be accepted on account of merely 237 meters increase in HRT length. Moreso, when the entire HEP itself was planned to be constructed in the same time duration.

Accordingly, the Commission is of the opinion that delay on this account due to the reasons attributable to the generator.”

163. We decline to accept such reasoning, the State Commission is duty-bound to examine the issue and decide the time limit that can be allowed under such circumstances after noting the factual position.

164. The Impugned Order passed by the State Commission and the reasoning recorded therein is erroneous and unreasonable, the time extension as sought by the GBHPPL in the appeal is allowed considering the above observations in the

preceding paragraphs due to the occurrence of events beyond the control of the GBHPPL including the delay by the Government/ Statutory authorities.

165. Undisputedly, the time overrun impacts the capital cost, therefore, it is important to re-examine the additional cost claimed by the GBHPPL.

166. In the light of the aforementioned judgment of this Tribunal, the State Commission is directed to re-examine the impact of time overrun on the capital cost.

167. As claimed by the GBHPPL, the escalation of Rs. 71.51 Crores in civil works was due to the following reasons, the issue shall be examined afresh:

- i. Geological overbrakes, leading to cost escalation not envisaged in the DPR;
- ii. Price escalations due to delays not envisaged in DPR;
- iii. Increase in length of HRT from 6028 meters to 6265 meters;
- iv. Increase in quantum of steel reinforcement for Diversion dam.

168. The State Commission has restricted the soft cost only up to the scheduled COD of the Project, whereas, the actual completion was extended due to several factors observed and concluded herein.

169. Considering that the time overrun has been allowed, the State Commission shall determine the soft cost as claimed by the GBHPPL after re-examining the facts as placed before it.

170. Further, the State Commission has also disallowed the increased expenditures on account of IDC due to the abovementioned time overrun, while doing the same, it has been observed that since the time overrun beyond the SCOD is not being allowed, hence, considering that all the Capital Expenditures

have been incurred till the SCOD, the IDC is being allowed on a pro-rata basis of the Capital Cost approved by the State Commission.

171. The appeal is allowed, and the appeal is remanded to the State Commission to the limited extent of re-determination of capital cost on account of time overrun as allowed, including determination of capital cost (hard cost, soft cost, IDC) as claimed in the appeal, the State Commission is also directed to re-determine the consequential tariff of the project.

Submissions of the UPCL in Appeal No. 389 of 2018

172. The UPCL has also filed the above-noted Appeal against the order dated 30.11.2016 passed by the UERC in Petition under Section 62 and 86(1)(a), the UPCL assailed the Impugned Order on the following counts:

- i. Annual Plant Availability Factor (NAPAF) of Budhil HEP as 85% instead of 90%;
- ii. Issue of incentive in case Monthly Plant Availability Factor (PAFM) exceeds due to overloading conditions; and
- iii. Reconsidering the downward allowance of design energy and pass an appropriate Order for fixing the design energy as per the Detailed Project Report (DPR).

173. The State Commission notified the UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015, wherein Regulation 47 provides norms of operation for Generating Stations have been provided which reads as under:

The norms of operation as given hereunder shall apply to the thermal generating stations:

(1) Normative Annual Plant Availability Factor (NAPAF):**(a) For all thermal generating stations: 85%****(b) For existing hydro generating stations:**

The trajectory for NAPAF fixed by the Commission in case of existing hydro generating stations, in the preceding Control Period would continue to be applicable. However, the NAPAF of the stations undergone RMU would be adjusted accordingly, considering the impact of RMU.

(c) For new hydro generating stations:

<i>Particulars</i>	<i>Normative Plant Availability Factor</i>
<i>Storage and Pondage type plants with head variation between Full Reservoir Level (FRL) and Minimum Draw Down Level (MDDL) of up to 8%, and there plant availability is not affect by silt.</i>	<i>90%</i>
<i>Storage and Pondage type plants with head variation between FRL and MDDL of more than 8%, where plant availability is not affect by silt.</i>	<i>The month wise peaking capability as provided by the project authorities in the DPR (approved by CEA or the State Government) shall form basis of fixation of NAPAF.</i>
<i>Pondage type plants where plant availability is significantly affected by silt.</i>	<i>85%</i>
<i>Run-of-river type plants.</i>	<i>To be determined plant-wise, based on 10-day design energy data, moderated by past available experience where /relevant.</i>

(i) A further allowance may be made by the Commission in NAPAF determination under special circumstances, e.g., abnormal site problem or other operating conditions, and known plant conditions.

Provided that in case of new hydro generating station the developer shall have the option of approaching the Commission in advance for fixation of NAPAF based on the principles enumerated in the table above.

Provided further that Generating Companies shall submit plant wise NAPAF alongwith the detailed calculations and reasons thereof as per the guidelines for calculation of NAPAF as laid down in Appendix – III to these Regulations, for seeking approval of the Commission.”

174. The UPCL submitted that the UERC passed the Impugned Order and in Para 3.5 it has determined the normative plant availability factor as 85% instead of 90% as provided under the Regulations, the State Commission has held as follows:

“3.5 NAPAF

The Petitioner in its petition did not submit the plant availability factor for FY 2015-16 and for the Control Period. The Commission asked the Petitioner to furnish the plant availability factor alongwith the detailed computation of the same in accordance with the regulations and also the relevant details in this regarding from CoD. In response, the Petitioner submitted that in accordance with the regulation 50(1) & 50(2) of the UERC Tariff Regulations, 2015, recovery of the Capacity Charge component is based on PAFM (Plant Availability Factor achieved during the month), where the PAFM itself is linked to DC (Declared Capacity) of each day during the month. Thus, the Petitioner submitted that the PAFM and DC are relevant only when there is a two-part tariff structure and the recovery of Capacity Charge

is linked to the Declared Capacities (DCs) during the month. However, the Petitioner submitted that since it was selling power in the merchant market on single part tariff, it did not declare its capacity previously. The Petitioner submitted that the sought data requirement was not applicable to it, and requested exemption from submission of details in this regard. The Petitioner also submitted that the remaining period of FY 2015-16 during which energy generated from its HEP would be supplied to UPCL is a lean period, hence, it would be difficult to recover the capacity charges based on the NAPAF in accordance with the regulations. The Petitioner, in this regard, requested to allow single-part tariff for FY 2015-16 so that applicable AFC would be recovered by it. Relevant Regulations 54(1) & 54(2) of the MYT Regulations, 2011 provide that:

“(1) The Annual Fixed Charges of Hydro Generating Station shall be computed on annual basis, based on norms specified under these Regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and Energy Charge, which shall be payable by the beneficiaries in proportion to their respective percentage share/allocation in the saleable capacity of the generating station, that is to say, in the capacity excluding the free power to the home State.

(2) The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be:

$AFC \times 0.5 \times NDM/NDY \times (PAFM/NAPAF)$ (in Rupees)

Where,

AFC = Annual fixed cost specified for the year, in Rupees.

NAPAF = Normative plant availability factor in percentage

NDM = Number of days in the month

NDY = Number of days in the year

PAFM = Plant availability factor achieved during the month, in Percentage

(3) The PAFM shall be computed in accordance with the following formula:

$$N \text{ PAFM} = 10000 \times \sum DCi / \{N \times IC \times (100 - AUX)\} \% i = 1$$

Where,

AUX = Normative auxiliary energy consumption in percentage

DCi = Declared capacity (in ex-bus MW) for the ith day of the month which the station can deliver for at least three (3 hours, as certified by the Uttarakhand State Load Despatch Centre after the day is over.

IC = Installed capacity (in MW) of the complete generating station.

N = Number of days in the month

(4) The Energy Charge shall payable by every beneficiary for the total energy supplied to the beneficiary, during the calendar month, on ex-power plant basis, at the computed Energy Charge rate. Total Energy Charge payable to the Generating Company for a month shall be:

$$\text{(Energy Charge Rate in Rs./kWh)} \times \{\text{Energy (ex-bus)}\} \text{ for the month in kWh} \times (100 - \text{FEHS}) / 100$$

(5) Energy Charge Rate (ECR) in Rupees per kWh on ex-power plant basis, for a Hydro Generating Station, shall be determined up to three decimal places based on the following formula:

$$ECR = AFC \times 0.5 \times 10 / \{DC \times (100 - AUX) \times (100 - FEHS)\}$$

Where,

DE = Annual Design Energy specified for the hydro generating station, in MWh, FEHS = Free Energy for home Station in percent, as applicable”

From the above and similar provides specified in MYT Regulations, 2015 it is apparent that the 50% of AFC is allowed to be recovered from energy charges and remaining 50% of AFC is to be recovered through 50% capacity charges. The Petitioner initiated supply of power w.e.f. December, 2015, i.e. during lean period of FY 2015-16, hence, it would not be appropriate to apply regulations for the recovery of AFC by way of energy charge and capacity charge since it would be difficult in achieving PAF equivalent to NAPAF while considering supply from Hydro Project during the lean period only. Accordingly, the Commission while relaxing the relevant regulations, allows recovery of AFC for FY 2015-16 through a single-part tariff, i.e. based on total AFC and saleable energy only. However, for the ensuing control period FY 2016-17 to FY 2018-19, recovery of AFC shall be carried out in accordance with the regulations based on the stipulated NAPAF of 85%.”

175. The UPCL filed a clarification application on 03.10.2017 being Petition No. 12 of 2017 for clarification of the order dated 30.11.2016, however, the Commission dismissed the said Petition No. 12 of 2017 vide order dated 18.12.2017.

176. The UPCL submitted that as per Regulation 49 of UERC (Terms and Conditions for Determination of Multiyear Tariff) Regulation, 2015, Normative

Annual Plant Availability Factor in respect of GBHPPL should be 90%, however, it has been wrongly taken by the Commission as 85%.

177. Further, submitted that once regulations are framed, the same are binding on the Commission also and there is nothing on record that Appellant has pleaded or proved silting in their plant, the FR value of Respondent is 1649.5 meters and MADDL value is 1638.8 which is less than 8%, hence the NAPAF ought to have been taken as 90%.

178. Thus, the NAPAF of Respondent No. 1 should be taken as 90%.

179. The UPCL submitted that design energy, as given in DPR, cannot be reduced, this Tribunal has decided the same principle in the redetermination of the generic tariff of Mohammadpur Small Hydro Generating Station (3 x 3.1 MW) of UJVNL wherein the Commission vide order dated 25.05.2017 held as under:

“there is no merit in adopting differential treatment for calculation of design energy initially for approval of DPR and adopting a different treatment at the time of filing of the Petition for Tariff determination. This differential treatment on the part of the Petitioner clearly depicts that at the time of getting the DPR approved the Petitioner tries to project higher quantum increase in generation after the Renovation and Modernization activity which actually cannot be attained.”

180. It is submitted that Regulation 50(6)(a) of the MYT Regulations, 2015 specifies the procedure to be followed when due to hydrological factors, design energy is affected.

181. Even in that case, only the CEA can revise the design energy of the station based on at least four years of data, thus, the Commission has erred in revising

the design energy, the relevant Regulation 50(6)(a) of MYT Regulations, 2015 is being reproduced herein below:

“50. Computation and Payment of Capacity Charges and Energy Charges for Hydro Generating Stations.

(6) In case actual total energy generated by a Hydro Generating Station during a year is less than the Design Energy for reasons beyond the control of the Generating Company, the following treatment shall be applied on a rolling basis on an application filed by generating company.

a) in case the energy shortfall occurs within ten years from the date of commercial operation of a generating station, the ECR for the year following the year of energy shortfall shall be computed based on the formula specified in sub-Regulation (5) above with the modification that the DE for the year shall be considered as equal to the actual energy generated during the year of the shortfall, till the Energy Charge shortfall of the previous year has been made up, after which normal ECR shall be applicable;

Provided that in case actual generation from a hydro generating station is less than the design energy for a continuous period of 4 years on account of hydrology factor, the generating station shall approach CEA with relevant hydrology data for revision of design energy of the station.”

182. The UERC submitted that as per the tariff order, 50% of the AFC is to be recovered through capacity charges and the remaining 50% through the energy charges, the Capacity charges with incentive, as mentioned in the regulation and

tariff order, provide for recovery of half of the AFC divided equally on monthly basis and the incentive based on a factor involving division of PAFM/NAPAF.

183. The PAFM is the Plant availability factor for the month, *inter-alia* is defined as the summation of daily declared capacities of the month divided by the number of days in a month, and the installed capacity reduced by normative auxiliary consumption.

184. The Incentive becomes due as the PAFM value moves over the NAPAF value, in the present case as PAFM moves over 85%.

185. Considering the overload capability of the plant and the pondage facility available, the declared capacities on daily basis may rise up to 110-115% of the installed capacity, and in turn result in values higher than the installed capacity and consequently PAFM over 100% resulting into large incentives.

186. Above mentioned, facts are brought before the UERC so as to verify and ascertain the impact of the same so that upon allowing for overload capacities the practical application of the present tariff order will remain in line with the intent of Regulations, and consequently, if required corrective measures be devised and laid down so that the generator may not acquire exceptionally high incentives.

Submissions of the GBHPPL in Appeal No. 389 of 2018

187. The GBHPPL submitted that the supply of power to UPCL started from the plant of Respondent No.1 on 01.12.2015, thereafter, the HEP supplied power in FY 2015-16, FY 2016-17, FY 2017-18, FY 2018-19, respectively.

188. For the FY 2015-16, the UERC in the Impugned Order allowed recovery of Annual Fixed Charges (AFC) through a single part tariff i.e. based on total AFC and saleable energy only, however, for the FY 2016-19, the UERC decided to allow recovery of AFC as per the Regulations based on the stipulated NAPAF of 85%.

189. For the FYs 2016-17, 2017-18, and January month of FY 2018-19, it is evident from analysis of the historical actual plant availability data, that HEP could never achieve the NAPAF of 90% due to the siltation issues which resulted in generation losses.

190. From the analysis of the data of all three consecutive Financial Years, it can be ascertained that the NAPAF of GBHPPL's HEP was much lower than 90% and in fact closer to 85%, the Data referred herein pertains to the PAFM achieved by the plant in the three FYs i.e. FY 2016-17, 2017-18 and FY 2018-19 (January month only).

191. As per Regulation 47(1) of UERC Tariff Regulations, 2015, as noted in the submissions of the UPCL, it can be observed that the said regulation provides that the NAPAF shall be 85% for the pondage type new hydro generating stations, which are significantly affected by silt.

192. The GBHPPL submitted that the UPCL, on wrong assumptions, has contended that the plant of the GBHPPL is not at all affected by silt, our attention was invited to the Generation data depicting actual plant availability for FYs 2016-17, 17-18, and till Jan in FY 2018-19, which is submitted at R-2(Colly) @ Pg.29 of the Reply.

193. It is stated that the plant witnessed a silt problem during March 2016, July 2016, February 2017, September 2017, August 2018, and September 2018.

194. In the said months the plant encountered severe siltation problems leading to a stoppage of generation, also the plant witnessed silt problems in the subsequent years too i.e. in FY 2020-21 and 2022-23, for which the GBHPPL has filed a petition before the UERC for recovery of shortfall in energy charges, which is pending.

195. Further, contended that the UPCL has completely failed to acknowledge the fact that there is a Standard Operating Procedure that is to be followed by each hydro generation plant at the time of operation of the same.

196. As per the SOP, the HEP is required to regularly undertake de-flushing of the plant and its reservoir which leads to loss of generation of power as water required to flush the silt deposited in the de-silting chamber and reservoir, is not utilized for power generation and is flushed through the side gates.

197. These factors lead to reduced generation of the plant on account of preventive steps undertaken in order to mitigate the event of plant stoppage in case of large silt deposition, this loss of generation incidental upon the generator to prevent silt deposition has to be considered in the determination of NAPAF of the hydro plant.

198. Further, submitted that the HEP generates power using water from the tributary of River Ravi, and the NAPAF of another hydropower plant, Chamera-III HEP, based on the same Ravi River, as determined by the CERC is also 85%.

199. Also argued that the UPCL was well aware, from the date of issuance of the Impugned Order, of the fact that the UERC allowed NAPAF at 85% in accordance with the Regulations considering that the Budhil HEP is affected by silt and also that the CERC vide its CERC (Terms and Conditions of Tariff) Regulations, 2014 had also specified the NAPAF at 85% for Chamera III HEP which is also situated on Ravi River, further, even though the Appellant also procures power from Chamera III HEP, however, it never raised the issue of NAPAF qua the said plant.

200. We find the submissions of the GBHPPL have merit and are based on facts, further, the relevant regulations as aforementioned provide for NAPAF of 85% for the pondage type new hydropower plants and are affected significantly by silt.

201. Regarding the issue of design energy, the GBHPPL referred to the Impugned Order (Para 4.1), the relevant extract is reproduced as under:

“In accordance with the above provision of the Regulations, corrections in computation of design energy made by the Petitioner is appropriate since design energy has to be based on 95% of the installed energy and without any overloading of the machines. Further, the Commission has also noted that subsequent to the preparation of the DPR in February, 2005, Government of Himachal Pradesh vide its notification dated 16.07.2005 mandated for Hydro Power Projects to release and maintain minimum flow to downstream of the diversion structure at 10% of the minimum inflows observed in the lean season. Thereafter, vide notification dated 09-09.2005, the Department of Pollution Control, Government of Himachal Pradesh increased the “Statutory Minimum Environment Flow” to 15%. The

Commission observed that the Petitioner has reduced the available discharge during the monsoon period also. However, the same is incorrect since during the monsoon period discharge of water need not be required to be released from the Petitioner's HEP as there would be sufficient influx remain available during this period. Considering the above submissions of the Petitioner and applying the corrections as discussed above the Commission has computed design energy of HEP as 283.54 MUs against 280 MUs consider by the Petitioner."

202. The GBHPPL submitted the UPCL contended in the Detailed Project Report submitted in the year 2005 stipulated the design energy of the hydro power plant at 313.33 Mus, however, the GBHPPL in its Tariff Petition claimed design energy as 280 MUs.

203. Reliance is placed on Regulation 50(6)(a) of UERC Tariff Regulations, 2015, which provides the procedure to be followed when, due to hydrological factors, the design energy is affected.

204. The GBHPPL submitted that the methodology adopted in the DPR did not consider the following:

- (i) UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulation, 2015, specifying design energy computation;
- (ii) Notification dated 16.07.2005 issued by Government of Himachal Pradesh regarding the mandated release of minimum flow to downstream of the diversion structure; and
- (iii) Notification dated 09.09.2005 regarding "Statutory Minimum Environment Flow" by the Department of Pollution Control Board Government of Himachal Pradesh.

205. It is stated that the GBHPPL, at the time of the hearing of the Tariff Petition, highlighted the above error, and the same was duly considered by the UERC in passing the Impugned Order.

206. The DPR computed the Design Energy based upon the energy generation in 90% dependable year, with 70 MW installed capacity at 15% overload, accordingly, computed the design energy of the plant as 313.33 MUs.

207. However, the said computation of design energy was erroneous based on the definition of Design Energy provided under Regulation 3(25) of UERC (Terms and condition for determination of Multi Year Tariff) Regulations, 2015 and also MYT Regulations, 2011, the Regulation 3(25) of UERC (Terms and condition for determination of Multi Year Tariff) Regulations, 2015 is reproduced hereunder:

“3. Definitions

In these Regulations, unless the context otherwise requires:

... ..

(25) “Design Energy” means the quantum of energy which can be generated in a 90% dependable year with 95% installed capacity of the hydro generating station;”

208. In this regard, it is a settled position of law that the Regulations or statutory provisions must be given primacy over any other document, notably, the CERC Tariff Regulations, 2009, Regulation 3(15), which also defines the term “Design Energy” as the quantum of energy which can be generated in a 90% dependable year with 95% installed capacity of hydro-generating station.

209. Accordingly, the UERC at the time of the tariff petition submitted the design energy as 280 MUs which was correctly recomputed by the UERC after applying three corrections which are as follows:

- i. 95% of installed capacity i.e. 66.50 MW has been considered in place of 70 MW;
- ii. No overload has been considered; and
- iii. Statutory minimum environment discharge of 0.91 Cusecs has been reduced from design discharge.

210. Further, the reliance of the UPCL on the Order dated 25.05.2017 about the re-determination of generic tariff for Mohammadpur SHP, wherein the design energy was considered as per DPR only, is misplaced.

211. It is stated that the Appellant, by referring to such order, has compared two different types of hydro plants, in this context, reference be made to Regulation 41 of the UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015 wherein it has been specified that for hydro power plant above 25 MW, the tariff is to be determined as per the UERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2015, while for renewable power plants, including small hydro plants, the tariff is to be determined as per UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2010 and 2013. Regulation 41 of the UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015 is reproduced hereunder:

“41. Applicability

(1) The Regulations specified in this Part shall apply for determining the tariff for supply of electricity to a Distribution Licensee from generating stations located in Uttarakhand.

Provided that determination of tariff for supply of electricity to a Distribution Licensee from renewable sources of generation including Small Hydel Projects having capacity upto 25 MW shall be in accordance with the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2010 and 2013 or as amended from time to time.

(2) The Commission shall be guided by the terms and conditions contained in this Part in determining the tariff for supply of electricity by a Generating Company to a Distribution Licensee.”

212. Hence, regulatory provisions/ principles applicable to renewable generating station(s) cannot be made applicable to non-renewable power plants which are regulated by separate tariff regulations of the State Commission.

213. Further, the UPCL has contended that the GBHPPL ought to have approached the CEA in case of dissatisfaction with the design energy determined by it, further, the UPCL also contended that under Regulation 50(6)(a) of MYT Tariff Regulations, 2015, the GBHPPL had to approach CEA in this regard.

214. The Regulation 50(6)(a) of MYT Tariff Regulations, 2015 is reproduced hereunder:

“50. Computation and Payment of Capacity Charges and Energy Charges for Hydro Generating Stations

... ..

(6) In case actual total energy generated by a Hydro Generating Station during a year is less than the Design Energy for reasons beyond the control of the Generating Company, the following

treatment shall be applied on a rolling basis on an application filed by generating company:

a) in case the energy shortfall occurs within ten years from the date of commercial operation of a generating station, the ECR for the year following the year of energy shortfall shall be computed based on the formula specified in sub-Regulation (5) above with the modification that the DE for the year shall be considered as equal to the actual energy generated during the year of the shortfall, till the Energy Charge shortfall of the previous year has been made up, after which normal ECR shall be applicable;

Provided that in case actual generation from a hydro generating station is less than the design energy for a continuous period of 4 years on account of hydrology factor, the generating station shall approach CEA with relevant hydrology data for revision of design energy of the station."

215. It is thus the UPCL's case that CEA is the nodal authority for ascertaining the design energy and deviation can only be considered after revision of the same by CEA, if the generator was not satisfied with the design energy determined by the authority, the proper course was to make a representation before CEA.

216. However, Regulation 50(6)(a) of MYT Regulations, 2015 provides the procedure to be followed when due to hydrological factors the design energy is affected, in such cases, firstly the generator has to wait for at least 4 years to establish that there has been a continuous shortage and thereafter it can move to CEA with relevant hydrological data for revision of design energy of the station.

217. The GBHPPL contended that the UPCL is trying to mislead this Tribunal by misinterpreting the aforementioned Regulation, notably, the said Regulation provides for revision of the design energy on account of hydrology factors and directs the generator to approach CEA with relevant hydrology data for revision of design energy of the station in case actual generation from such plant is less than the design energy for consecutive four years.

218. However, in the case of the GBHPL, the UERC revised the design energy only based on the fact that design energy was to be based on 95% of the installed capacity and without any overloading of machines and also keeping in view the Notifications dated 16.07.2005 and 09.09.2005.

219. Thus, the UERC considered the same hydrology as was envisaged in the DPR and hence there was no case for the GBHPPL to approach CEA as contended by the UPCL since there were no hydrology issues in the first 10 years of the operation.

220. In other words, the issue was the error in the computation and not the change in the hydrology of the plant.

221. The UPCL contended that considering the overload capacity of the plant and the pondage facility available, the declared capacity on a daily basis may increase up to 110%- 115% of the installed capacity and in turn result in values higher than the installed capacity and consequently PAFM (Plant Availability Factor for the month) over 100% resulting into large incentives.

222. The GBHPPL submitted that it has been following the procedure and tariff norms as provided in the Impugned Order in terms of raising tariff invoices as per the UERC MYT Tariff Regulations.

223. The NAPAF specified for any large hydro plant pertains to the average Plant Availability Factor of the specific hydro plant for the whole financial year, hence, it is erroneous to compare the specified Normative Annual Plant Availability Factor (NAPAF) of the hydro plant with any particular month, in a financial year, with overload generation.

224. Further, as per Regulation 49 (4) of the UERC Tariff Regulations, 2015, the incentive provided for the Plant availability factor uniformly applies to all the generators in the State, the Regulation 49 (4) of the UERC Tariff Regulations, 2015 is reproduced hereunder:

“49. Computation and Payment of Annual Fixed Charges and Energy Charges for Thermal Generating Stations

... ..

(4) Incentive to a generating station or unit thereof shall be payable at a flat rate of 50 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in Regulation 47(2).”

225. Moreover, all the generating projects are conceived with some overloading and hence, the project of the GBHPPL is not an isolated case having 10% overload capacity, further, the UERC is guided by the regulations framed by the Central Commission which also provides identical provisions in its Regulations concerning the incentives, these regulations are generic in nature and applicable to all generators including IPPs, Central/State-owned generators from where the UPCL procures its requirement of power.

Our Observations and Conclusion

226. Regulation 47(1) of UERC Tariff Regulations, 2015 provides that the NAPAF for pondage type hydropower plants shall be 85% in case the plant is significantly affected by the problem of silt.

227. The GBHPPL placed on record, the data indicating the impact of silt on its power plants along with photographs depicting the same.

228. The regulations notified by the State Commission are binding on all, and once it is clear from the regulation for such plants as the GBHPPL's plant, the NAPAF shall be 85% as approved by the State Commission.

229. The contentions of the UPCL are found to be incorrect and are rejected on the issue of NAPAF, the State Commission has rightly considered the NAPAF as 85% for the GBHPPL's HEP.

230. The UPCL contended that the Detailed Project Report submitted in the year 2005 stipulated the design energy of the hydropower plant at 313.33 Mus, however, the GBHPPL in its Tariff Petition claimed design energy as 280 MUs.

231. As already observed, it is the settled principle of law that the regulations notified by the State Commission shall override any other document, if are contrary to the regulations.

232. Regulation 3(25) of UERC (Terms and condition for Determination of Multi Year Tariff) Regulations, 2015 provides as under:

“3. Definitions

In these Regulations, unless the context otherwise requires:

... ..

(25) “Design Energy” means the quantum of energy which can be generated in a 90% dependable year with 95% installed capacity of the hydro generating station;”

233. Therefore, the design energy must be determined as per the above-noted regulation.

234. The State Commission has rightly determined the design energy based on the quantum of energy that can be generated in a 90% dependable year with 95% installed capacity of the hydro generating station, further, the State Commission has correctly factored in the notifications of the GoHP as noted in the preceding paragraphs.

235. The determination on its basis has been decided in the first captioned appeal also, which is 280 Mus.

236. We agree with the submission of the GBHPPL that the reliance on the Order dated 25.05.2017 about the re-determination of generic tariff for Mohammadpur SHP, wherein the design energy was considered as per DPR only, is misplaced, the two cases are distinct and are covered under different regulations.

237. We find the submission of the UPCL, that the design energy can be modified by CEA only, is also misplaced as the issue in hand is not of the change in hydrology but is the determination of design energy as per relevant regulations.

238. The appeal of the UPCL on this count is rejected being devoid of merit.

239. We also agree with the submissions of the GBHPPL on the issue of incentives, the same has to be provided as per the regulations, as already stated that the Regulations notified are binding to the contesting parties.

240. The UPCL, if aggrieved, should have challenged the relevant Regulations, till the Regulations are in existence, it binds all the parties.

241. We are satisfied that the issues raised in this appeal (Appeal 389 of 2018) are devoid of merit, the appeal deserves to be set aside.

CONCLUSION

242. In the light of above observations and the facts placed before us, the following is concluded:

A) Appeal 100 of 2017

- (i) Erroneous computation of Design Energy owing to non-consideration of minimum environment discharge obligation at all times through the year; - **allowed in favour of the GBHPPL, the design energy shall be 280 MUs as claimed.**

- (ii) Non-consideration of Tie-Line losses in the computation of saleable energy; - **allowed in favour of the GBHPPL, the tie-line losses should be considered as part of saleable energy, and payment of energy is made on scheduled at ISTS metering point**, the Commission is directed to re-calculate the claim of the GBHPPL as per the above observation regarding saleable energy afresh based on actual line losses.
- (iii) Erroneous disallowance of Capital Cost of the Project on account of the following:
- (a) Interest During Construction (**IDC**) due to time overrun beyond the control of the Appellant;
 - (b) Certain soft costs incurred by the project on account of time-overrun due to factors beyond the control of the Appellant;
 - (c) Geological surprises beyond the control/contemplation of the Appellant. -
- the appeal is remanded to the State Commission to the limited extent of re-determination of capital cost on account of time overrun as allowed, including determination of capital cost (hard cost, soft cost, IDC) as claimed in the appeal, the State Commission is also directed to re-determine the consequential tariff of the project.

B) Appeal 389 of 2018

- (i) The Appeal is dismissed as devoid of merit.

ORDER

For the foregoing reasons stated above, we are of the considered view that the captioned Appeal No. 100 of 2017 has merit and is allowed to the extent as observed and concluded in this judgment.

The captioned Appeal No. 389 of 2018 is dismissed as is devoid of merit.

The Impugned Order dated 30.11.2016 passed by the UERC is set aside to the limited extent as concluded herein above, the State Commission is directed to pass the consequential order strictly in compliance with the observations and conclusions made herein.

The Captioned Appeal and IAs, if any, are disposed of in the above terms.

PRONOUNCED IN THE OPEN COURT ON THIS 28TH DAY OF AUGUST, 2024.

(Virender Bhat)
Judicial Member

(Sandesh Kumar Sharma)
Technical Member

pr/mkj