

Before

# UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No. 31 of 2020

**In the matter of:**

Petition seeking determination of Term of Use for Utilisation of 220 kV S/c dedicated Transmission line of M/s Greenko Budhil Hydro Electrical Project for evacuation of power from Generating Station operating in Ravi Basin, Himachal Pradesh by connecting 2x315 MVA, 400/220/33 kV GIS Pooling Station at Lahal, Himachal Pradesh to 220 kV side of S/s at Budhil HEP through a 220 kV S/C transmission line from Lahal to Budhil.

**In the matter of:**

Himachal Pradesh Power Transmission Corporation Limited

Himachal Pradesh State Electricity Board Limited

... Petitioners

AND

**In the matter of:**

Uttarakhand Power Corporation Ltd.

M/s Greenko Budhil Hydro Power Pvt. Ltd.

State Load Dispatch Centre, Uttarakhand (SLDC)

... Respondents

CORAM

**Shri D.P. Gairola**      **Member (Law)**

**Shri M.K. Jain**        **Member (Technical)**

**Date of Hearing: August 14, 2020**

**Date of Order: December 04, 2020**

This Order relates to the Petition jointly filed by Himachal Pradesh Power Transmission Corporation Limited (HPPTCL) and Himachal Pradesh State Electricity Board Limited (HPSEBL) (hereinafter collectively referred to as "Petitioners") under Section 64(5) of the Electricity Act, 2003 (the Act) and in the manner specified in Regulation 10 of UERC (Conduct of Business) Regulations, 2011 seeking determination of Terms of Use for utilisation of 220 kV S/C dedicated Transmission

Line of M/s Greenko Budhil Hydro Electric project (hereinafter referred to as “M/s Greenko”) for evacuation of power from Generating Stations operating in Ravi Basin, Himachal Pradesh by connecting 2x315 MVA, 400/220/33 kV GIS Pooling Station at Lahal, Himachal Pradesh to 220 kV side of S/S at Budhil HEP through a 220 kV S/C Transmission Line from Lahal to Budhil as an interim arrangement.

The Petitioners have made the following prayers:

- (i) Expeditiously admit the accompanying Petition.
- (ii) Determine the Terms of Use of utilisation of 220 kV S/C Dedicated Transmission Line of Budhil HEP for evacuating power from Generating Stations operating in Ravi Basin, Himachal Pradesh by connecting 2x315 MVA, 400/220/33 kV GIS Pooling Station at Lahal, Himachal Pradesh to 220 kV side of sub-station at Budhil HEP through a 220 kV S/C transmission line from Lahal to Budhil.
- (iii) Allow the proposed evacuation arrangement to be utilised on the same Terms of Use post 30.09.2021 for all future Beneficiary(ies) of the SHPs with prior intimation to the Commission.
- (iv) Condone any inadvertent omissions/errors/rounding off differences/ shortcomings and permit the Petitioners to add/alter this filing and make further submissions as may be required by the Commission.
- (v) Pass any other Order as the Commission deem fit proper keeping in view the facts and circumstances of the case.

## **1. Background & Petitioner’s submissions**

- 1.1. HPPTCL came into existence on 27.08.2008 as a part of unbundling of erstwhile HPSEB. It is a deemed transmission licensee under first, second and fifth provisions of Section 14 of the Electricity Act, 2003 and is vested with the function of intra-State transmission of electricity through Intra-State Network in the State of Himachal Pradesh as notified by the GoHP. Further, in terms of Section 39 of the Act, the GoHP declared HPPTCL as the State Transmission Utility (STU). HPPTCL is entrusted with the construction, operation and maintenance of sub-stations and transmission lines of 66 kV and above. HPPTCL as STU is also entrusted with the formulation, updation and execution of Transmission Master Plan of the State for strengthening of Transmission network and evacuation of power from

upcoming Generating Stations.

- 1.2. HPSEBL is a deemed licensee under the first proviso to Section 14 of the Act, 2003 for distribution and supply of electricity in the State of Himachal Pradesh.
- 1.3. M/s Greenko executed a PPA on 01.12.2015 with UPCL to supply power generated from its Budhil HEP plant which is situated in Himachal Pradesh and connected to Chamera-III Sub-station of PGCIL through its dedicated 220 kV S/C Zebra line on D/C tower, transmission line.
- 1.4. The Petitioners submitted that the evacuation of power from upcoming generating stations at Ravi Basin in District Chamba of Himachal Pradesh was discussed and finalised in 27<sup>th</sup> meeting of Standing Committee on Transmission System Planning of Northern Region (hereinafter referred to as "SCM-NR") held on 30.05.2009. The transmission elements agreed in the meeting were construction of 400/220 kV Sub-station at Lahal and a transmission line which would be connected to PGCIL's Chamera Pooling Sub-station by a 400 kV D/C transmission line. Further, it was decided that initially the line would be charged at 220 kV level and subsequently with the coming up of more generation the line can be charged at 400 kV level ensuring that the ICTs (2x315 MVA) at Chamera Pooling Sub-station are not overloaded.
- 1.5. The Petitioners submitted that in the above meeting, it was also discussed to make evacuation arrangements for power from upcoming Budhil HEP with installed capacity of 70 MW, then being developed by M/s Lanco Green Power Private Ltd. (hereinafter referred to as "M/s LGPPL") (Currently owned by M/s Greenko). In the 27<sup>th</sup> SCM-NR meeting dated 30.05.2009, two options for the evacuation of power were discussed, i.e. (i) either by LILO of Chamera-III (NHPC)-PGCIL's Chamera Pooling Sub-station 220 kV D/C line with Twin Moose conductor, or; (ii) By constructing 220 kV S/C line (Twin Moose) on D/C Towers upto Chamera-III by utilizing one 220 kV bay at Chamera-III, space for which was available at Chamera-III. M/s LGPPL opted for the second option.
- 1.6. Subsequently, in order to relieve the financial burden on the developer of high cost of twin MOOSE conductor line for a 70 MW capacity project, M/s Greenko was permitted to construct 220 kV S/C Zebra line on D/C towers. The developer, then M/s LGPPL vide its letter dated 29.06.2009 agreed that M/s LGPPL shall execute immediately 220 kV D/C line with S/C Zebra conductor up to Chamera-III, in order to cater to the evacuation

requirements of its sub-station at Budhil, as envisaged in the DPR and as per Techno-Economic Clearance. In future, as the load capacity increases second circuit shall be strung using high capacity INVAR conductor. On further increase of generation load the first circuit conductor shall also be upgraded to INVAR conductor. Further, space for additional 220 kV bay in the powerhouse substation at Budhil shall be provided by LGPPL to cater to the needs of the other projects.

- 1.7. The Petitioners submitted that HPPTCL, keeping in view the evacuation requirements of power from Bharmour Valley of Ravi Basin, proposed construction of 33/220 kV, 50/63 MVA Lahal Pooling Sub-station & 220 kV transmission line from the said Lahal Sub-station to 220 kV switchyard of Budhil HEP and submitted the DPR of the same for approval. CEA approved the construction of the same vide letter dated 05.06.2012. The said arrangements underwent some changes thereafter and 400/220 kV transformation at Lahal Substation was preponed considering the developments, viz. Chamera-III HEP (230 MW) and Budhil HEP (70 MW) leading to loading the 315 MVA transformer at Chamera pooling substation to its capacity and also due to proposed construction of various other HEPs & SHPs.
- 1.8. Accordingly, HPPTCL initiated the construction of 2X315 MVA, 400/220/33 kV GIS Pooling Sub-station at Lahal for evacuation of power from various IPPs. The Lahal Pooling Sub-station was expected to evacuate the power from various proposed projects viz. Bajoli Holi HEP (3X60 MW, M/s GMR Energy Limited), Kutehr HEP (260 MW), various Small HEPs with a proposed capacity between 40 to 45 MW etc. However, the construction of Lahal Pooling Sub-station was delayed due to uncontrollable factors, viz. torrential rains in September, 2017 which have damaged the road thereby hampering the transportation of transformers to the site from Chamba.
- 1.9. For evacuating the power injected in the Lahal Pooling Sub-station, HPPTCL initiated the construction of a 40 km. 400 kV D/C Twin Moose Transmission Line to PGCIL's Chamera Pooling Sub-station.
- 1.10. The Petitioners submitted that the construction of 400 kV transmission line from Lahal Pooling Sub-station got delayed and therefore, an interim arrangement by utilising the dedicated transmission line from Budhil HEP to Chamera-III was under consideration. Further, construction of 220 kV S/C on D/C tower from Lahal to Budhil was also started and completed by HPPTCL so that the same can be connected to the existing dedicated

transmission line from Budhil HEP to Chamera-III which is further strung to Chamera Pooling Sub-station.

1.11. The Petitioners submitted that M/s GMR is constructing a 3x60 MW Bajoli Holi Hydro Electric project in the District Chamba of Himachal Pradesh on Ravi River. The Hydro Power scheme is a Plant with a day pondage which can generate the full power capacity in peak flood season on continuous basis and during the off peak season, either on a flat load basis continuously or few hours on peak capacity basis. The power from Bajoli Holi HEP was originally proposed to be evacuated through the following transmission system to be implemented by HPPTCL.

(i) Bajoli Holi to Lahal Pooling Sub-station of HPPTCL using 220 kV D/C line.

(ii) Lahal Pooling Sub-station-PGCIL's Chamera Pooling Sub-station through 400 kV D/C line.

1.12. The Petitioners also submitted that keeping in view the mismatch of timelines of construction of 400 kV D/C Twin Moose Transmission Line from Lahal Pooling Sub-station with M/s BHHEP, an interim evacuation arrangement of power was discussed in 39<sup>th</sup> meeting of SCM-NR held on 29<sup>th</sup> & 30<sup>th</sup> May, 2017 wherein the developer of Bajoli Holi HEP, i.e. M/s GMR proposed temporary arrangement for evacuation of power from their project as follows:

- To connect from Plant bus to Lahal Pooling sub-station through 220 kV D/C transmission line Bajoli Holi-Lahal Pooling Sub-station by expediting the commencement and completion of construction.
- Lahal Pooling Sub-station -Budhil HEP 220 kV D/C line (nearing completion).
- Budhil HEP-Chamera-III 220 kV S/C line (existing).
- NHPC's Chamera-III-PGCIL's Chamera Pooling station through existing ISTS transmission system.

After deliberations, it was agreed that a separate meeting would be convened by CEA involving CTU, GMR, HPPTCL and HPSEBL to deliberate on the issues related to transmission system for evacuation of power from Bajoli Holi HEP. Subsequently, the proposed meeting which was attended by CTU, GMR, HPPTCL and HPSEB was held on 14.07.2017 wherein it was decided that power will be evacuated from Bajoli Holi plant by

Lahal Pooling Sub-station to Budhil HEP to Chamera-III.

- 1.13. The Petitioners submitted that numerous meetings were convened by CEA involving CTU, GMR, HPPTCL, HPSEBL, M/s Greenko and UPCL. After many deliberations, it was agreed that HPPTCL would complete the construction of 220 kV line between Lahal and Budhil and priority for evacuation from one unit of Bajoli Holi HEP and SHPs amounting to 26 MW may be decided to avoid overloading of 400/220 kV, 2x 315 MVA Chamera Pooling Sub-station of PGCIL. However, in the event of outage of one 315 MVA ICT, provision of SPS may be kept to backdown the generation of Bajoli Holi and SHPs of HPPTCL. Further, it was agreed that first right w.r.t. usage of 220 kV S/S Budhil to Chamera transmission line is with M/s Greenko and there shall be no incremental line losses imposed upon UPCL on account of this additional flow of power in the line.
- 1.14. The Petitioners submitted that HPSEBL vide its letter dated 19.06.2020 addressed to HPPTCL has sought evacuation of only upto 26 MW of power generated from SHPs of Himachal Pradesh using the dedicated transmission line of M/s Greenko as the commissioning of the Bajoli Holi HEP is delayed and is not expected in the near future. The Petitioner further submitted that the proposed interim arrangement will not only cater to the Budhil HEP system in case of (n-1) but the system shall also be able to survive the tower outage contingency as two routes viz (i) through 220 kV Budhil-Chamera-III and (ii) through 220 kV Lahal-Budhil line shall be available.
- 1.15. The Petitioner submitted that all the works that were to be carried out by HPPTCL, i.e. Lahal Pooling Sub-station alongwith Lahal-Budhil transmission line have been completed and HPPTCL is in the process of charging its Lahal Pooling Sub-station and Lahal-Budhil line. However, the Terms of Use needs to be determined by the Commission to enter into a commercial arrangement.
- 1.16. The Petitioners submitted that the metering arrangements for accounting, injection of power at 33 kV level from SHPs are in place at Lahal Pooling Sub-station and metering of energy, accounting of power flow from Lahal Pooling Sub-station to Budhil HEP are also in place. The Petitioner also submitted that with regard to transmission losses, UPCL in the meeting held on 03.01.2020 had already agreed for the interim evacuation of power through the dedicated line of Budhil HEP provided that the incremental losses are not borne by UPCL. In the matter, M/s Greenko has submitted that the exiting line losses based on the

historical data is 0.19% and any increase in losses beyond 0.19% shall be borne by HPSEBL.

1.17. With regard to Transmission charges, the Petitioners submitted that M/s Greenko owns and operates the 2 x 35 MW run-of-river hydro-electric power project located on Budhil stream, a major tributary of Ravi River, in Bharmaur tehsil, Chamba District, Himachal Pradesh. The Project has been operational since 30.05.2012. M/s Greenko entered in a long term PPA with UPCL and the tariff of the same is being approved by the Commission from time to time. The project has been granted connectivity to the Inter-State transmission system at Chamera-III pooling station through 220 kV S/C on D/C dedicated transmission line from Budhil HEP to Chamera-III.

1.18. The Petitioners submitted that the Capital Cost has been determined by the Commission vide its Order dated 30.11.2016. As the breakup of transmission line cost is not available in the Order, proposed transmission charges could not be worked out. The Petitioners submitted that the transmission charges to be borne by Budhil HEP and beneficiaries of Himachal Pradesh are required to be approved while considering the below differential rights for usage of transmission system.

1. As agreed in the CEA meeting dated 03.01.2020, M/s Greenko has the first right with respect to the usage of the dedicated line between Budhil HEP-Chamera-III in case of any contingency.
2. The energy of Budhil HEP will not be affected due to incremental losses which shall be accounted in HP's power.
3. As agreed in the CEA meeting dated 03.01.2020, in order to avoid any overloading of 400/220 kV, 2x315 MVA Pooling Station at Chamera, the generation from the power plants viz. SHPs will be backed down with the help of Special Protection System (SPS) whose installation costs will not be borne by GBHEP.
4. The said arrangement, the cost of which has been completely borne by the Petitioners and other future beneficiaries of the system, shall also increase the reliability of the evacuation arrangement of power from M/s Greenko as the same shall cater to n-1 contingencies.

1.19. The Petitioners submitted that as evident from above, the privilege of first right of usage of the dedicated transmission line lies with M/s Greenko and in case of any contingency Himachal Pradesh power will be curtailed and therefore, the charges for usage of this

transmission system should also be differentiated in terms of lower transmission charges allocation rather than allocating it on proportional basis between the users of the transmission system. Further, as the evacuation of power is subject to daily availability of the system hence while specifying the Terms of Use, the Commission may please take this critical aspect into cognisance and allow charges to be billed considering daily declared capacity.

1.20. The Petitioners requested the Commission to determine the Terms of Use of the usage of the dedicated transmission line of M/s Greenko alongwith transmission charges on actual per MW per day usage basis corresponding to daily declared capacity keeping in view the above facts and circumstances and for the purpose of commercial agreements between the various stakeholders.

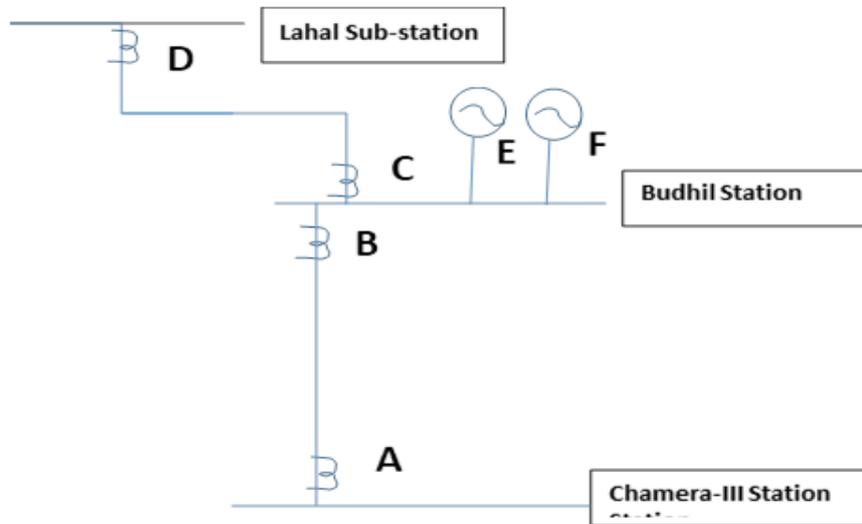
## **2. Respondents' submissions**

2.1. The Commission forwarded the copy of the Petition to M/s Greenko, SLDC, UPCL for comments and fixed a hearing on 24.07.2020 for admissibility. Subsequently, UPCL vide its letter dated 21.07.2020 requested the Commission for additional time for submission of comments in the matter. In this regard, the Commission accepted the request of UPCL and rescheduled the same for 14.08.2020.

2.2. In the matter, M/s Greenko vide its emails dated 09.07.2020 submitted the correspondences made between officials of M/s Greenko which shows that HPPTCL had commissioned its 400/220/33 kV Pooling Sub-station at Lahal and connected with Budhil HEP through 220 kV S/c Transmission Line and the said line has been charged on the basis of charging code issued by NRLDC. Further, M/s Greenko informed that a meeting was held on 26.06.2020 with all the concerned stakeholder and it was decided that any injection of power from HPSEBL SHPs using Budhil 220 kV Budhil-Chamera III dedicated line would be commenced after fulfilment of the following:

- The exiting line losses based on the historical data is 0.19% and any increase in losses beyond 0.19% shall be borne by HPSEBL.
- Mechanism for separate DSM accounting for Budhil power and HPSEBL power and separate DSM bill for Budhil and HPSEBL power from NRPC.
- Back down of HPSEBL power in case of contingency.

- Approval of UERC w.r.t. usage of dedicated Budhil-Chamera-III transmission line.
- In the matter, M/s Greenko also submitted before the NRLDC w.r.t. capping of 0.19% Budhil HEP losses, proposed energy accounting and settlement arrangement as follows:



Injection of (Budhil + HP) at ISTS injection = **A**

Main set Budhil Gross Injection (**H**) = **E+F**

Standby set Budhil Gross Injection (**Hs**) = **B-C**

Budhil net Injection (**I**) = **H(1-0.0019) = 0.9981xH**

HP injection = **A-I**

- The Injection of HP at Budhil bus will be considered as HP injection. With the above arrangement, even if there is a drawl by HP at Budhil bus, the accounting will take care of the proposed arrangement.
- If there is any change in loss% figure due to the Commission's order, the deviation account can be revised accordingly.

2.3. UPCL vide its letter dated 13.08.2020 submitted that the Petitioners who have filed the Petition fall under the jurisdiction of HPERC and are not subject to the jurisdiction of this Commission. Further, with regard to Budhil HEP and dedicated transmission line, the Commission can only look into the dispute between M/s Greenko and UPCL. There is neither any firm agreement/terms & conditions nor the constituents involved are firm. UPCL also submitted that the Petition is against the provisions of the Act and Regulations

and it does not appear to be legally tenable. Further, it appears that regulations of HPERC may get affected, if certain terms about first right to schedule energy of M/s Greenko, back-down instruction to other SHPs of Himachal Pradesh etc. are given in case of any constraints in the Budhil-Chamera III line. In addition to the above, UPCL submitted that the matter involves dealing with Tariff Order, however, neither relief nor appropriate fee has been paid. The Petition in the present form and in the light of the circumstances and facts is not admissible and is not liable to be admitted.

- 2.4. The Commission conducted a hearing on 14.08.2020. During the hearing, it was brought to the notice of the Commission that the transmission line from Lahal to Budhil is being used for evacuation of power of SHPs of Himachal Pradesh from the last one month which has been objected by UPCL in its oral submission during the hearing. Further, based on the submission made by the parties in the matter, the Commission directed that status quo shall exist for the evacuation of power of SHPs, i.e. upto 26 MW of Himachal Pradesh from Lahal to Budhil till further Order of the Commission in order to avoid bottling up of generation on the terms & conditions w.r.t. energy accounting and settlement as laid down by NRLDC. The Commission also directed Petitioners and the Respondents to submit their rejoinder, if any.
- 2.5. In the matter, SLDC of Uttarakhand submitted that it verifies Declared Capacity of Budhil HEP on the basis of validated MRI data of ABT compliant meters installed at generator bays of the Plant being provided by UPCL. Change in power flow due to the proposed interconnection shall not affect the power flow (meter reading) in the above mentioned ABT meters.
- 2.6. In the matter, M/s Greenko submitted that UPCL is entitled to draw power from the grid based on daily schedule punched by Budhil HEP on which the concurrence is being provided by UPCL irrespective of actual generation by Budhil HEP and deviation in injection of power from SHPs of Himachal Pradesh injecting power at Budhil Sub-station shall not impact the entitlement of drawl of Budhil HEP power from grid by UPCL based on the approved schedule. DSM account shall be separately maintained by NRLDC. Further during the hearing, it was submitted by SLDC that verification of the Declared Capacity of Budhil HEP is based upon the meter readings of meters installed at Budhil end meant for recording of generation by Budhil HEP at 220 kV transmission line. Any revision in injection schedule by SHPs of Himachal Pradesh shall not impact the process being adopted

by UPCL/SLDC for verification of monthly Declared Capacity.

### **3. Petitioners' rejoinder**

- 3.1. The copy of the reply submitted by UPCL was forwarded to the Petitioners for comments. In the matter, the Petitioners have submitted rejoinder vide letter dated 22.08.2020.
- 3.2. With regard to jurisdiction of the Commission, the Petitioners submitted that just because the Petitioners are the licensees of the State of Himachal Pradesh do not prohibit them to file a Petition before the Commission. Further, it has been clearly mentioned in the Petition that as the Petitioners are using a dedicated transmission line of a generation utility whose tariff has been determined by the Commission, therefore, it has filed the present Petition before the Commission. Further, the present Petition has been filed in terms of Section 64(5) of the Electricity Act, 2003.
- 3.3. With regard to tariff revision, the Petitioners submitted that the present Petition does not seek any re-determination of tariff but only seeks its share of transmission charges as mentioned in the Petition. Further, with regard to UPCL's comment that the Commission can only look into the dispute between Budhil HEP and UPCL, the Petitioners submitted that the jurisdiction of the Commission is on all matters pertaining to the utility/generating company which falls under the jurisdiction and, therefore, the contention raised by UPCL is liable to be rejected.
- 3.4. With regard to the absence of firm agreement, the Petitioner submitted that HPSEBL has signed PPAs with SHPs of Himachal Pradesh for procurement of power and has already proposed to evacuate the power by utilising the dedicated transmission line of Budhil HEP for an interim period till 30.09.2021. The Petitioners also submitted that an interim Transmission Service Agreement shall be signed between the Petitioners and M/s Greenko & UPCL once the Commission determines the Terms of Use of utilisation of dedicated transmission line of Budhil HEP.
- 3.5. The Petitioners also submitted that as per the recovery mechanism proposed in the Petition there is no loss compensation that would be due on Respondents even in case of outage of Budhil-Chamera-III line as the Petitioners have pleaded for evacuation of power on the basis of daily available spare capacity. The Petitioners have, therefore, in its Petition sought for lower transmission charge allocation as the availability of the line as well as spare capacity of Chamera-III Pooling Sub-station is subject to daily availability and if on a given

day, evacuation is not carried out due to outage of the transmission infrastructure, the transmission charges should not be payable by HPSEBL nor any penalty of such non-availability applies to UPCL.

- 3.6. With regard to the comment of UPCL on implication on HPERC's regulation, the Petitioners submitted that Himachal Pradesh entities have already agreed to the Budhil HEP first right to schedule energy and backing down of SHPs of Himachal Pradesh in case of constraints and accordingly, the same does not affect any Regulations of HPERC. Further, as the interim evacuation has been operational for a period of more than a month and there has been no issues so far.
- 3.7. With regard to the comment of UPCL on seeking relief and filing fee for determination of tariff by the Petitioners, the Petitioners submitted that necessary relief has already been sought in the Petition and they have paid appropriate fee. Further, there is no requirement of Board of Directors approval as there is no determination of tariff and it only deals with the recovery of already determined tariff.

#### **4. Commission's Analysis and view**

- 4.1. The present Petition has been filed under Section 64(5) of the Electricity Act, 2003 seeking determination of Terms of Use for Utilisation of 220 kV S/C dedicated Transmission Line of M/s Greenko for evacuation power from Generating Stations operating in Ravi Basin, Himachal Pradesh viz. SHPs of upto 26 MW by connecting 2x315 MVA, 400/220/33 kV GIS Pooling Sub-station at Lahal, Himachal Pradesh to 220 kV side of S/S at Budhil HEP through a 220 kV S/C Transmission Line from Lahal to Budhil as an interim arrangement.
- 4.2. The Commission has considered the submissions of HPPTCL, HPSEBL, M/s Greenko, SLDC and UPCL. The Petitioners requested for usage of dedicated transmission line of M/s Greenko and requested the Commission to determine the terms and condition for utilisation of the said dedicated transmission line alongwith the share of transmission charges applicable on them for evacuation of power upto 26 MW from the SHPs of Himachal Pradesh.

Further, in the matter, M/s Greenko had expressed its concern over the issue of treatment of transmission line losses, Deviation Settlement Mechanism (DSM) losses, backing down of HPSEBL's plants in case of contingency, impact of any revision in schedule by SHPs of Himachal Pradesh on the power drawl entitlement of UPCL.

Furthermore, UPCL raised its concern over the issue of jurisdiction of the Petitioners as well as the Commission, absence of agreement, admissibility of the Petition alongwith other issues.

- 4.3. The Commission heard all the parties and carefully considered their written submissions. The Commission has critically analysed the issues raised by the Petitioners, UPCL, M/s Greenko and SLDC. After examining the relevant material available on records, issues raised by the Petitioners and the Respondents have been dealt in the subsequent paragraphs of this Order.

**A. Jurisdiction of the Commission**

- 4.4. UPCL vide its reply contested that UERC has no jurisdiction in the matter and the Petitioners fall under the jurisdiction of Himachal Pradesh Electricity Regulatory Commission (HPERC). Moreover, the Petitioners have not disclosed as to under what provisions of Act and Regulations the reliefs claimed can be granted. Further, the Commission can only look into the dispute between Budhil HEP and UPCL with respect to Budhil HEP and dedicated transmission line. Furthermore, the Commission cannot supervise or enforce its directions outside the State, hence, there is a real apprehension that later there may be difficulties regarding the same.
- 4.5. In the matter, it is to be noted that the present Petition has been filed under Section 64(5) of the Electricity Act, 2003 which specifies as follows:

*“Notwithstanding anything contained in Part X, the tariff for any inter-State supply, transmission or wheeling of electricity, as the case may be, involving the territories of two states may, upon application made to it by the parties intending to undertake such supply, transmission or wheeling, be determined under this section by the State Commission having jurisdiction in respect of the licensee who intends to distribute electricity and make payment thereof.”*

The Commission is of the view that just because the Petitioners are the licensees of the State of Himachal Pradesh does not prohibit them to file a Petition before this Commission. Furthermore, as far as jurisdiction of this Commission is concerned, it is worth mentioning that the Petitioners have sought permission for using the dedicated transmission line of M/s Greenko for the evacuation of power upto 26 MW generated from SHPs of Himachal Pradesh whose tariff is determined by this Commission and paid by the consumers of the State of Uttarakhand. Accordingly, the Commission has the sole

jurisdiction w.r.t. matters pertaining to utilisation of the assets of Budhil HEP by UPCL or any other third party. Hence, the arguments made by UPCL are not tenable.

## **B. Firm Agreement**

- 4.6. UPCL submitted that the Petition cannot be admitted as there is neither any firm agreement/terms & conditions nor the constituents involved are firm.
- 4.7. In the matter, it is to be noted that HPSEBL has already signed PPAs with the SHPs of Himachal Pradesh for procurement of power and has accordingly, proposed to evacuate the power by utilizing the dedicated transmission line of Budhil HEP. Further, the present Petition has been filed before the Commission for determination of terms of use for utilisation of the dedicated transmission line of Budhil HEP for evacuation of 26 MW power from SHPs of Himachal Pradesh. The beneficiary for the said system owned by Budhil HEP shall be HPSEBL. Therefore, the contention of UPCL that there is neither any firm agreement nor exists any terms & conditions for utilisation of the dedicated transmission line of Budhil HEP, is not tenable.

## **C. Future Multiple Disputes**

- 4.8. UPCL submitted that future dispute in the matter may be so diverse that UPCL may be involved in multitude of litigations unnecessarily.
- 4.9. In the matter, it is pertinent to mention that during the meeting convened by CEA on 03.01.2020, UPCL had agreed for the interim evacuation of power through the dedicated line of Budhil HEP provided that the incremental losses do not devolve on UPCL. It has been observed that UPCL has been taking varying stand in the matter. In the meetings held in CEA for planning the transmission systems, UPCL agreed to the interim evacuation of power through the dedicated transmission line of Budhil HEP subject to no extra burden of transmission losses devolving on it, however, it is now raising hypothetical issues before the Commission regarding future disputes. UPCL instead of giving its consent for interim arrangement, should have raised such issues in the very first meeting held by CEA with the other stakeholders in the matter. Moreover, instead of making a general statement w.r.t. future disputes, UPCL should have submitted some instances. The objection raised by UPCL is vague and without any supporting details, hence, not tenable.

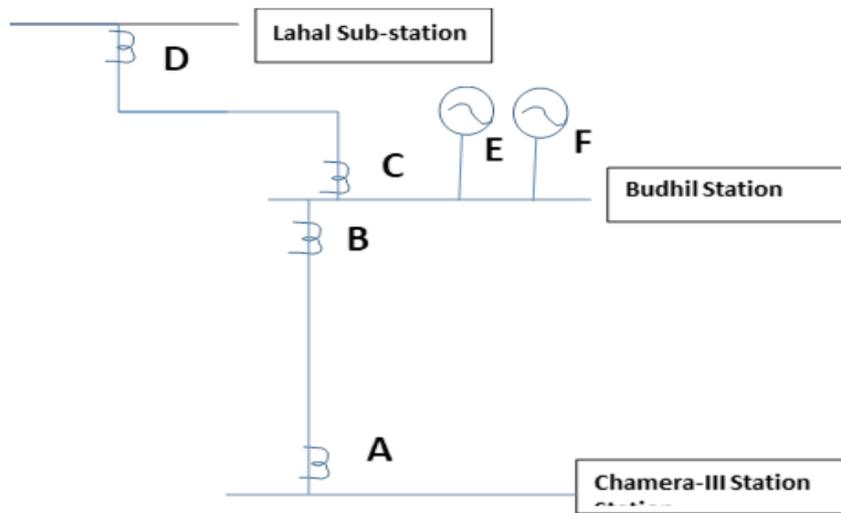
#### **D. First Right of Use in case of Line Constraints**

- 4.10. The Commission observed that during the meeting held on 03.01.2020 to discuss issues related to transmission system for evacuation of power from Bajoli Holi HEP and SHP's in Himachal Pradesh, it was decided among the stakeholders that the first right with respect to the usage of Budhil HEP–Chamera-III 220 kV S/C line is of M/s Greenko and HPPTCL has agreed for the provision to backdown the generations of Bajoli Holi and SHPs in case of any contingency and also agreed to bear any incremental losses due to such arrangement.
- 4.11. In the matter, the Commission observed that the instant transmission line was approved and constructed as Dedicated Transmission Line for evacuation of its own energy by M/s Greenko. Therefore, M/s Greenko has contended that it should have the first right to use the line in case of any power flow constraint. The Commission has examined the submissions of the Petitioners and the Respondents. The Commission observed that M/s Greenko is evacuating power from its generating station using dedicated transmission line to supply power to UPCL. M/s Greenko has executed a long term PPA with UPCL whereas HPSEBL has executed a medium term PPA for supply of power from SHPs of Himachal Pradesh till 30.09.2021. Further, since M/s Greenko has built the transmission line, it is not fair to curtail the power of Budhil HEP in case of contingency. Therefore, in case of any contingency in the said line, all the connected entities other than Budhil HEP shall be curtailed on pro-rata basis of their scheduled energy.

#### **E. Transmission Line Losses**

- 4.12. During the meeting held on 03.01.2020 at CEA to discuss the issues related to transmission system of Budhil HEP for evacuation of power of Bajoli Holi HEP and SHPs of Himachal Pradesh, UPCL stated that they have no objection on the proposed interim arrangement provided that power flow from Budhil HEP to UPCL is not interrupted and there is no incremental transmission line losses coming to UPCL account.
- 4.13. In the matter, the Commission observed from the historical data of Budhil HEP that the existing line losses are 0.19% and as per meeting held on 03.01.2020 any increase in loss beyond 0.19% shall be borne by HPSEBL. Further, the Petitioners also agreed to the above proposal and agreed to determine the energy injected by Budhil HEP at the interstate point, i.e. Chamera- III SEM by subtracting 0.19% losses from the energy injected by Budhil HEP at 220 kV Budhil Sub-station.

4.14. With regard to accounting of line losses, the Commission reiterates that NRLDC has provided the energy accounting and settlement arrangement to determine the losses pertaining to energy injected by Budhil HEP and SHPs of Himachal Pradesh as given hereunder:



Injection of (Budhil + HP) at ISTS injection = **A**

Main set Budhil HEP Gross Injection (**H**) = **E+F**

Standby set Budhil HEP Gross Injection (**Hs**) = **B-C**

Budhil HEP net Injection (**I**) =  $H(1-0.0019) = 0.9981 \times H$

HP injection = **A-I**

- The Injection of HP at Budhil HEP bus will be considered as HP injection. With the above arrangement, even if there is a drawl by HP at Budhil bus, the proposed arrangement will take care of the energy accounting .

With regard to the installation of meters, the Commission is of the view that all the costs pertaining to installation of SPS system including any installation or re-installations of meters at Budhil HEP due to the aforesaid interim arrangement, shall be borne by the Petitioners.

## F. DSM losses

4.15. With regard to DSM losses, M/s Greenko submitted that UPCL is entitled to draw power from the grid based on daily schedule punched by Budhil HEP on which the concurrence

is being provided by UPCL irrespective of actual generation by Budhil HEP to be measured by meters installed at Budhil end (meters at Sub-station of Budhil recording power from Budhil HEP). Any deviation in injection of power from SHPs of Himachal Pradesh injecting power at Budhil Sub-station shall not impact the entitlement of drawl of power of Budhil HEP from grid by UPCL based on the approved schedule. Further, DSM account shall be separately maintained by NRLDC based on the approved schedule by NRLDC for Budhil HEP and SHPs of Himachal Pradesh and their respective deviation recorded at Chamera-III end for Budhil HEP and for SHPs after netting off Budhil HEP power. Injection of power from SHPs by the Petitioners on Budhil transmission line shall be separately accounted by NRDLDC and will not be clubbed with the injection of power by Budhil HEP. Accordingly, deviation in actual injection of power from SHPs in Himachal Pradesh will not impact the drawl schedule for UPCL since UPCL shall be entitled to draw power from grid based on the schedule approved by UPCL and maintained by NRLDC.

Accordingly, any revision in schedule, if any, by SHP of Himachal Pradesh will neither change the schedule of Budhil HEP nor will impact drawl entitlement of UPCL.

4.16. With regard to Scheduling and DSM segregation for both Budhil HEP and HPSEBL, the Commission observed that NRLDC in the meeting held by CEA on 26.06.2020 has agreed for separate scheduling and DSM accounting in line with the agreed loss levels by the entities.

#### **G. Verification of Declared Capacity**

4.17. With regard to the verification of the Declared Capacity, SLDC, Uttarakhand submitted that it verifies Declared Capacity of Budhil HEP on the basis of validated MRI data of ABT meter installed at generator bays of the plant being provided by UPCL. Further, change of power flow due to the proposed interconnection shall not affect the power flow (meter reading) in the above mentioned ABT meters.

4.18. In the matter, M/s Greenko submitted that there should not be any impact on the currently followed procedure for verification of monthly Declared Capacity by SLDC, Uttarakhand and status-quo needs to be maintained and the Declared Capacity for Budhil HEP needs to be continued on the basis of comments of SLDC, Uttarakhand.

4.19. In the matter, the Commission is of the view that SLDC, Uttarakhand shall continue to verify the Declared Capacity of Budhil HEP as it is verifying in the past on the basis of

validated MRI data of ABT meter installed at generator bays of the plant being provided by UPCL or in accordance with the procedure laid down in the Regulations. Further, the Petitioners shall ensure that change of power flow due to the proposed interconnection shall not affect the power flow (meter reading) in above mentioned ABT meters.

#### **H. Additional expenditure due to interim arrangement**

4.20. The Petitioners vide letter dated 09.07.2020 have undertaken to make good any loss incurred by M/s Greenko or/and UPCL arising out of operation of interim arrangement for evacuation of 26 MW power injected at HPPTCL's Lahal Pooling Sub-station and further transmitted by Budhil to Chamera-III transmission line. Accordingly, all the expenditure incurred or to be incurred pertaining to interim arrangement for evacuation of 26 MW power from SHPs of Himachal Pradesh shall be borne by the Petitioners only. Further, any additional expenditure incurred or to be incurred by M/s Greenko or/and UPCL due to interim arrangement for evacuation of power from SHPs of Himachal Pradesh which have executed PPA with HPSEBL, shall be reimbursed by the Petitioners to M/s Greenko or/and UPCL, as the case may be.

#### **I. Applicability of Terms of Use for future beneficiary(ies)**

4.21. The Petitioners submitted that though HPSEBL has PPA till 30.09.2021 for supply of 26 MW power from SHPs situated in Himachal Pradesh, however, the Commission may allow the proposed evacuation arrangement to be utilised on the same Terms of Use post 30.09.2021 for all future Beneficiary(ies) of the SHPs with prior approval of the Commission till the time 400 kV Lahal-Rajera line is commissioned.

4.22. The Commission observed that during the meeting held in CEA on 03.01.2020 in the matter, CTU had enquired from HPPTCL whether the arrangement is a temporary arrangement, or they are planning a second alternative path from Budhil. In reply, HPPTCL stated that this is an interim arrangement for evacuation of power from Bajoli Holi and SHPs till the 400/220 kV Lahal Sub-station as well as the 400 kV line from Lahal to PGCIL's 400 kV Chamera pooling Sub-station line are commissioned. HPPTCL also submitted that this arrangement is beneficial in the event of any n-1 contingency. If the line from Budhil-Chamera goes out, this arrangement could be treated as an alternate path for power evacuation, making Budhil HEP system more reliable for M/s Greenko.

4.23. The Commission has gone through the submissions of the Petitioners and observed that during the meeting held at CEA on 12.09.2019, HPPTCL informed that 400 kV D/C line from Lahal to Chamera Pooling Sub-station line is expected to be commissioned in the third quarter of 2021. Therefore, the question of benefit to M/s Greenko in the event of any n-1 contingency does not arise at present as the said line has not been commissioned so far. Further, the Petitioners have also not mentioned about the physical progress of the 400 kV D/C Lahal to Chamera line. Accordingly, taking cognizance of the fact that HPSEBL has signed PPA with the SHPs only upto 30.09.2021 and the said 400 kV D/C line has not been commissioned till date, the Commission is of the view that the proposed interim arrangement shall continue only till 30.09.2021. Further, as far as permission for utilisation of the proposed interim arrangement by all future beneficiary(ies) on the same Terms of Use is concerned, the Commission is of the view that the matter will be dealt by the Commission separately based on the Petition, if any, filed by future beneficiary(ies).

**J. Transmission charges for using dedicated Transmission line of Budhil HEP**

4.24. The Petitioners submitted that the Capital Cost has been determined by the Commission vide its Order dated 30.11.2016, however, the breakup of transmission line cost is not available in the said Order. The Petitioners submitted that as M/s Greenko has the first right w.r.t. the usage of the dedicated line between Budhil HEP – Chamera-III in case of any contingency, SHPs of Himachal Pradesh are to be backed down to avoid overloading and all the cost pertaining to the interim arrangement are to be borne by the Petitioners, therefore, the charges for usage of the said dedicated transmission line should also be differentiated in terms of lower transmission charges allocation rather than allocating it on proportional basis between the users of the transmission system.

4.25. The Commission observed that the Budhil HEP was put under commercial operation on 30.05.2012 and the transmission charges were included in the cost of “E&M works including transmission line”. Accordingly, the Commission directed M/s Greenko to submit capital cost as on COD and year wise capitalisation pertaining to evacuation system including line, bays etc. which is being used for supply of power from the SHPs of Himachal Pradesh alongwith the detailed year-wise breakup of the O&M expenses pertaining to the evacuation system.

4.26. In reply, M/s Greenko submitted that Budhil HEP is an acquired project and the project's

due diligence and takeover was carried out considering a different cost accounting perspective based on underlying contracts for executing project Civil, Electro-mechanical and Hydro-mechanical works and was not based on component-wise cost for cost-plus based power sale arrangement in future, it is due to these reasons that the information sought by the Commission cannot be submitted. M/s Greenko also submitted that earlier also the Commission had sought the same information during its proceedings for determination of tariff initially and considering the aforesaid reasons, the Commission determined the first tariff for M/s Greenko's Budhil plant. Further, M/s Greenko submitted O&M expenses details for Budhil HEP pertaining to the last three financial years as follows:

<b>Nature of O&amp;M Expenses</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>
Transmission Line (in Rs.)	23,72,028	24,76,486	24,78,000
Bay expenses as paid to NHPC (in Rs.)	35,54,440	37,96,464	40,60,308
<b>Total (in Rs.)</b>	<b>59,26,468</b>	<b>62,72,950</b>	<b>65,38,308</b>

4.27. The Commission while determining the ARR for Budhil HEP vide Order dated 30.11.2016 had examined all the contracts to determine the admissible capital cost pertaining to E&M works and that included the cost pertaining to transmission line also since component wise analysis of costs pertaining to E&M works was not possible due to absence of relevant information.

4.28. The power generated by Budhil HEP is transmitted over a distance of approximately 18 km through a dedicated 220 kV S/C Zebra line on D/C tower. For determination of cost of the said dedicated transmission line, the Commission once again examined the annual accounts and Contracts pertaining to Budhil HEP. The Commission observed that CWIP pertaining to transmission line was Rs. 4.51 Crore and 'Pre-operating expenses pending allocation' was Rs. 102.75 Crore in FY 2009-10. The Commission also observed that in the subsequent financial year, i.e. FY 2010-11, there was no CWIP against transmission line and 'Pre-operating expenses pending allocation' was reduced to a few thousand rupees. The methodology of apportionment/allocation of pre-operative expenses among the assets is not clear from the annual accounts. Further, it is not clear whether any additional expenditure has been incurred after the date of capitalisation of transmission line. Accordingly, the Commission is of the view that considering the cost of transmission line on certain assumptions may lead to inappropriate transmission charges to be paid by the Petitioners which would not be correct. Further, the Commission has also examined various CEA reports related to transmission line to have a reference/benchmark cost in the matter,

however, no such cost has been specified in the CEA reports.

4.29. In the absence of availability of actual capital cost pertaining to dedicated transmission line and also in the absence of any reference/benchmark cost, the Commission is of the view that one of the following two alternatives can be exercised by the concerned parties, i.e. the Petitioners, M/s Greenko and UPCL based on the mutual agreement of the parties concerned and submit the same to the Commission within one month of the date of the Order:

**Alternative A**

M/s Greenko shall charge from the Petitioners for the usage of its dedicated transmission line based on the Annual Revenue Requirement (ARR)/Annual Transmission charges (ATC) determined by HPERC for HPPTCL vide its Tariff Orders based on actual per MW per day usage basis corresponding to daily declared capacity till the interim arrangement is effective, i.e. upto 30.09.2021.

**Alternative B**

The Commission observed that 400 kV D/C line from Lahal Sub-station to PGCIL's 400 kV Chamera Sub-station is expected to be commissioned in the third quarter of 2021 and once the line is completed, undoubtedly dedicated transmission line of Budhil HEP will help to evacuate the power of the Petitioners in case of n-1 contingency and accordingly, 400 kV D/C line from Lahal Sub-station to Chamera Sub-station will serve as an alternate line to evacuate, power of Budhil HEP in the event of outage of the existing dedicated transmission line of Budhil HEP.

Accordingly, interim arrangement may be allowed provided that in case of n-1 contingency, the Petitioner(s) shall permit Budhil HEP to evacuate its power through 400 kV D/C line from Lahal Sub-station to Chamera Sub-station till the useful life of the plant, free of cost.

4.30. Further, as far as the Petitioners submission w.r.t. differentiated/lower transmission charges for usage of the said dedicated transmission line rather than allocating it on proportional basis between the users of the transmission system is concerned, the Commission does not agree that the Petitioner should get any benefit of lower allocation of transmission charges for the Budhil HEP dedicated system on account of the reason forwarded by the Petitioner that curtailment/backdown of generation shall be thrust upon

it firstly. It should be kept in mind that the dedicated line was constructed by Budhil HEP at its own cost and definitely to provide itself smooth evacuation and any third party beneficiary is only accommodated with the consent of Budhil HEP and without any doubt will be required to share charges of the said dedicated line/system. However, the Commission is of the view that if Alternative-A is adopted, the Petitioner(s) are required to pay the transmission charges in proportion to the power evacuated by them using dedicated transmission line of Budhil HEP on actual per MW per day usage basis corresponding to daily declared capacity.

**K. Rebate and Late Payment Surcharge**

• **Rebate**

- (1) For payment of bills in full through letter of credit on presentation or through National Electronic Fund Transfer (NEFT) or Real Time Gross Settlement (RTGS) payment mode within a period of 5 working days of presentation of bills, a rebate of 2% shall be allowed;
- (2) Where payments are made on any day after 5 days and within a period of 30 days of presentation of bills, a rebate of 1% shall be allowed.

• **Late Payment Surcharge**

- (1) For the default in payment beyond sixty (60) days from the billing, a surcharge (Late Payment Surcharge) at the rate of 1.25% per month or part thereof shall be levied on the amount remaining unpaid.

5. Ordered accordingly.

**(M.K. Jain)**  
**Member (Technical)**

**(D.P. Gairola)**  
**Member (Law)**