

**Before**

# **UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**Petition No. 38 of 2021**

**In the matter of:**

Petition seeking utilisation of 220 kV S/C dedicated Transmission Line of M/s Greenko Budhil Hydro Electric Project for evacuating power from small hydro projects operating in Ravi Basin, Himachal Pradesh of upto 26 MW and from Bajoli Holi HEP of upto 60 MW by connecting 2x315 MVA, 400/220/33 kV GIS Pooling Station at Lahal to 220 kV side of S/S at Budhil HEP on the same Terms of Use (Alternative-A) as determined by the Commission vide its Order dated 04.12.2020 read with Suo-moto Order dated 30.06.2021.

**In the matter of:**

1. Himachal Pradesh Power Transmission Corporation Limited
2. Himachal Pradesh State Electricity Board Limited
3. M/s Bajoli Holi Hydro Power Pvt. Ltd. ... Petitioners

**AND**

**In the matter of:**

1. Uttarakhand Power Corporation Ltd.
2. M/s Greenko Budhil Hydro Power Pvt. Ltd.
3. State Load Dispatch Centre, Uttarakhand (SLDC) ... Respondents

**CORAM**

<b>Shri D.P. Gairola</b>	<b>Member (Law)-Chairman (I/c)</b>
<b>Shri M.K. Jain</b>	<b>Member (Technical)</b>

**Date of Hearing: November 16, 2021**

**Date of Order: January 17, 2022**

This Order relates to the Petition dated 19.10.2021 jointly filed by Himachal Pradesh Power Transmission Corporation Limited (HPPTCL), Himachal Pradesh State Electricity Board Limited (HPSEBL) and M/s Bajoli Holi Hydropower Pvt. Ltd. (M/s BHHPL/Bajoli Holi HEP) (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, 2014 seeking approval of the Commission 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” or “Budhil HEP”) for evacuation of power from generating stations operating in Ravi Basin, Himachal Pradesh and from BHHPL 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 till 31.03.2022 or upto commissioning of 400 kV D/C Transmission Line whichever is earlier on the same terms of use as decided by the Commission vide Order dated 04.12.2020 read with Order dated 30.06.2021.

The Petitioners have made the following prayers:

- (i) Expeditiously admit the accompanying Petition.
- (ii) Pass an interim order allowing BHHPL to evacuate power from 220 kV S/C dedicated Transmission Line of Budhil HEP upto 60 MW from 15.11.2021 onwards and SHEPs to continue evacuating upto 26 MW power.
- (iii) Permit utilisation of 220 kV S/C Dedicated Transmission Line of Budhil HEP for evacuating power from SHPs upto 26 MW and from Bajoli Holi HEP upto 60 MW till 31.03.2022 or upto the commissioning of 400 kV D/C Transmission line whichever is earlier from 2x315 MVA, 400/220/33 kV GIS Pooling Station at Lahal, Himachal Pradesh to 220kV side of S/s at Budhil HEP through a 220 kV S/C Transmission Line (1.8 km) from Lahal to Budhil, on the same Terms of Use (Alternative-A) as approved by the Commission in its order dated 04.12.2020 in Petition No 31 of 2020 read with Order dated 30.06.2021.
- (iv) Allow the Petitioners to approach the Commission in case some unforeseen circumstances arises and the evacuation arrangement is required to be continued for a short-term period beyond 31.03.2022.
- (v) Condone any inadvertent omissions/errors/rounding off differences/ shortcomings and permit the Petitioner to add/alter this filing and make further submissions as may be required by the Commission.

- (vi) Pass any other Order as the Commission deem fit and proper keeping in view the facts and circumstances of the case.

## **1. Background**

- 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 Act 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. BHHPL is a company incorporated under the companies Act 1956, having its registered office at 302, New Shakti Bhawan, IGI airport, New Delhi-110037. It is currently developing a 180 MW (3x60 MW) hydro power project on the River Ravi in the Chamba. The Project has also been registered with UNFCCC as a CDM Project and has completed the WCD audit.
- 1.4. 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.
- 1.5. 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.

- 1.6. 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.
- 1.7. 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.
- 1.8. 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. Central Electricity Authority (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.

- 1.9. 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 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.
- 1.10. 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.
- 1.11. 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.
- 1.12. M/s GMR is constructing a 3x60 MW Bajoli Holi HEP in the District Chamba of Himachal Pradesh on Ravi River. The Hydro Power station 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.
- 1.13. 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 BHHPL, 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 Transmission Line (nearing completion).
- Budhil HEP–Chamera-III 220 kV S/C Transmission Line (existing).
- NHPC's Chamera-III-PGCIL's Chamera Pooling station through existing inter-state 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.

1.14. 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 & 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 Special Protection System (SPS) may be kept to backdown the generation of Bajoli Holi HEP 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.

1.15. 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 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.

1.16. Accordingly, HPPTCL and HPSEBL had jointly filed a Petition before the Commission 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. Further, through the said Petition, the Petitioners had also requested the Commission to 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.

1.17. In the matter, the Commission vide its Order dated 04.12.2020 in Petition no. 31 of 2020 specified the terms of use of the dedicated transmission line to be utilised till 30.09.2021 and suggested two alternatives that could be exercised by the concerned parties based on mutual agreement of the concerned parties and inform the Commission within one month of the date of the Order.

Further, the Commission rejected the prayer of the Petitioners regarding permission for utilisation of proposed evacuation arrangement on the same Terms of Use for all future beneficiary(ies) stating that the matter will be dealt by the Commission separately based on the Petition, if any, filed by future beneficiary(ies).

1.18. Subsequently, in compliance to the Commission's said Order, a meeting was held on 15.01.2021 among the parties wherein UPCL suggested another methodology different from the alternative suggested by the Commission. The parties approached the Commission for appropriate directions in the matter since the methodology suggested by UPCL in the meeting is different from the alternative suggested by the Commission vide its Order dated 04.12.2020 for recovery of transmission charges by M/s Greenko from HPPTCL/HPSEBL for using its dedicated transmission line for the purpose of evacuation of power from generating plants situated in Himachal Pradesh.

In the matter, the Commission vide Suo-moto Order dated 30.06.2021 decided that Alternative-A, i.e. *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*, suggested by the Commission vide its Order dated 04.12.2020 shall be applicable for recovery of transmission charges for using dedicated transmission line of Budhil HEP. Further, from the said Order the Commission also decided that permission for utilisation of the proposed interim arrangement by all future beneficiary(ies) will be dealt by the Commission separately based on the Petition, if any, filed by future beneficiary(ies).

Subsequently, HPPTCL submitted a letter dated 29.09.2021 before the Commission requesting to allow time of three weeks to file the Petition before the Commission in accordance with the directions of the Commission. The Commission vide letter dated 05.10.2021 allowed the time extension sought by HPPTCL and directed HPPTCL to file a Petition in accordance with the provisions of UERC (Conduct of Business) Regulations, 2014 before the Commission. Accordingly, the present Petition has been filed by the Petitioners seeking approval of the Commission for utilisation of 220 kV dedicated Transmission Line of Budhil HEP for evacuation of power from SHPs situated in Himachal Pradesh upto 26 MW and from BHHPL upto 60 MW on the same Terms of Use (Alternative-A) as determined by the Commission vide Order dated 04.12.2020 and Suo-moto Order dated 30.06.2021.

## **2. Petitioners' submissions**

- 2.1. The Petitioners submitted that HPPTCL is developing an evacuation system for transmission of power generated from various proposed/under construction Hydro Power Projects located in the Ravi Basin of Himachal Pradesh. The evacuation system consists of a 19 km 220 KV D/C Transmission Line to Lahal Pooling station, 2x315 MVA, 400/220/33 kV GIS Pooling Station at Lahal and a 40 km, 400 kV D/C Twin Moose transmission line to Chamera Pooling Station of PGCIL.
- 2.2. HPPTCL submitted that in view of evacuation requirements of power from Bharmour Valley of Ravi Basin proposed construction of 33/220 kV, 50/63 MVA Pooling station & 220 kV line from 33/220 kV Lahal Sub-station up to 220 kV yard of Budhil HEP and

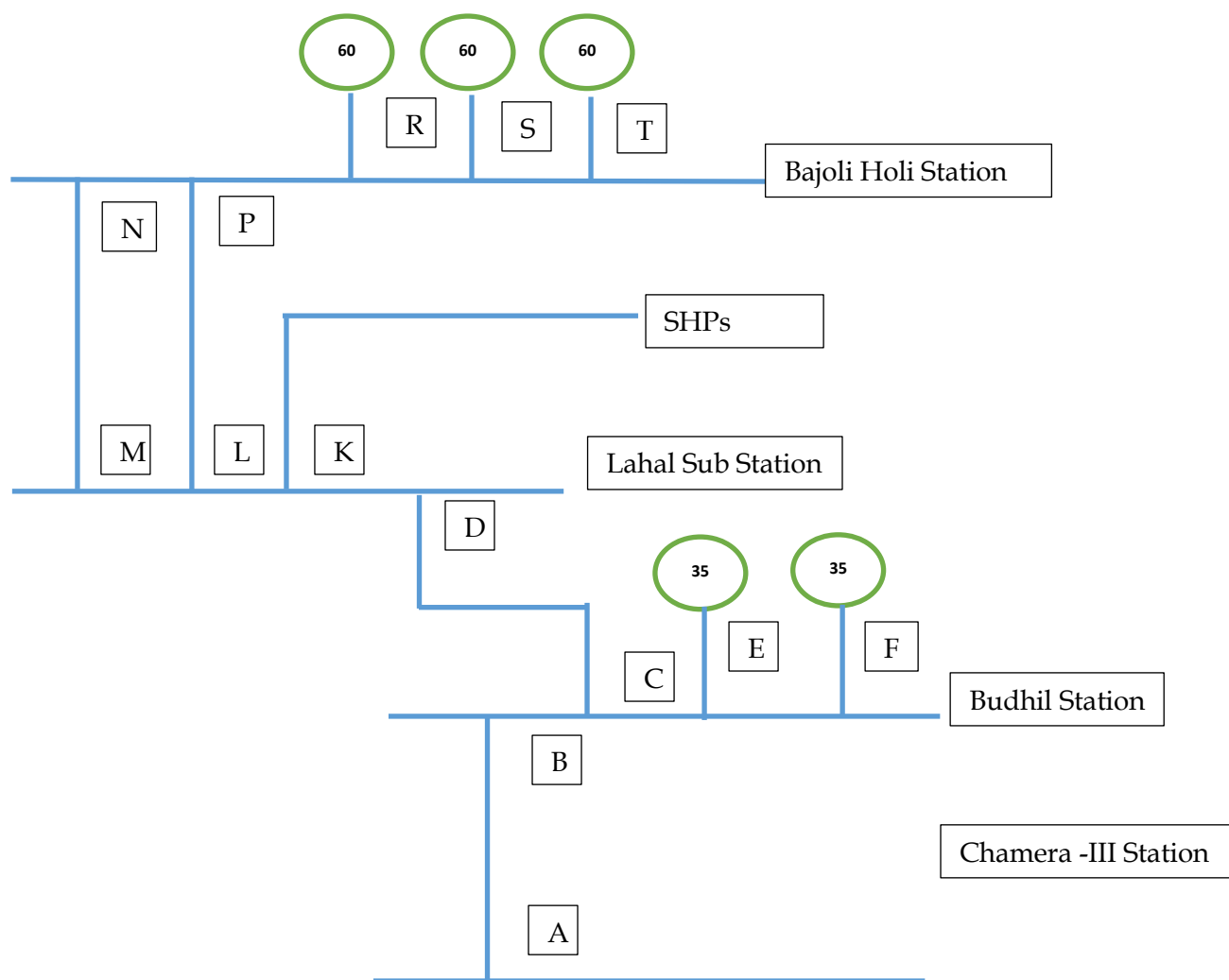


submitted the DPR of the same for approval from CEA vide its Letter no. HPPTCL/TranchII/2012/1094 dated 26.05.2012. CEA, vide its Letter no. 8/20/SP&PA-12/610 dated 05.06.2012 approved the construction of the same. Accordingly, HPPTCL developed the 33/220 kV, 50/63 MVA transformer as a part of above referred Lahal Pooling Station and also developed the 220 kV line from 33/220 kV Lahal Sub-station up to 220 kV yard of Budhil HEP.

- 2.3. HPPTCL submitted that the construction of 400 kV D/C Twin Moose Transmission Line is slightly delayed due to abnormal rainfall and due to unprecedented outbreak of 2nd wave of Covid-19 pandemic in 2021 and is now expected to be commissioned latest by March 2022.
- 2.4. The Petitioners submitted that the Commission vide its Order dated 04.12.2020 in Petition No 31 of 2020 and Suo-motu Order dated 30.6.2021 in Petition No 29 of 2021 (Suo-moto) had determined the Term of Use for utilisation of 220 kV S/C dedicated Transmission Line of Budhil HEP 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.
- 2.5. The Petitioners submitted that in the above-mentioned Order dated 04.12.2020, the Commission has decided that the proposed interim arrangement shall continue till 30.09.2021 only and permission for utilisation of the proposed interim arrangement by all future beneficiary(ies) will be dealt by the Commission separately based on the Petition, if any, filed by future beneficiary(ies).
- 2.6. The Petitioners submitted that on account of recurring power shortages in winter months, HPSEBL has entered into long/medium term PPAs with same SHPs and is desirous to continue the interim evacuation of upto 26 MW till March 31, 2022 or upto completion of the above Transmission Line whichever is earlier. It is further clarified that the SHPs are the very same SHPs for which approval was granted in Petition No. 31 of 2020.
- 2.7. The Petitioners submitted that BHHPL is currently developing a 180 MW (3x60 MW) hydro power project on the Ravi River in the Chamba valley and it is in advanced stage of construction and is expected to be completed by October 2021 and requires evacuation from

15th November 2021.

- 2.8. The Petitioners submitted that post commissioning, Bajoli Holi HEP would generate upto 60 MW Round the Clock (RTC) till the commissioning of 400 kV Lahal D/C Transmission Line which is expected latest by 31.03.2022, and in order to avoid idling of hydro generation, BHHPL intends to evacuate power outside the State of Himachal Pradesh from the said interim arrangement and is willing to pay the transmission and other charges (Alternative-A) as per the terms of usage determined by the Commission vide its Order dated 04.12.2020 read with Suo-moto Order dated 30.06.2021.
- 2.9. The Petitioners submitted that the proposed evacuation of power was discussed in the meeting held with CEA dated 17.06.2021 and after detailed deliberations, following was agreed:
1. Evacuation of power from BHHPL may be allowed only with SPS through Lahal- Budhil- Chamera III- Chamera Pooling Station 220 kV line as an interim arrangement till the commissioning of Lahal- Chamera 400 kV D/c line. Also, first priority of power evacuation through the existing lines is of Budhil HEP and Chamera III HEP. It is worth mentioning that the Budhil- Chamera III 220 kV S/C line is a dedicated line of Greenko for Budhil HEP.
  2. Injection of power from Bajoli Holi HEP and small hydro stations connected at Lahal should be such that it does not overload the 220 kV S/c line from Budhil to Chamera-III HEP considering the injection of power from Budhil HEP. In case of outage of one ICT at Chamera Pooling Station, the generation projects connected at Lahal need to be backed down.
  3. HPPTCL needs to file petition in UERC for the quantum of power planned to be evacuated through this path.
- 2.10. The Petitioners submitted a diagrammatic representation of the evacuation of the power from BHHPL (60 MWs) and SHPs (26 MW) through Lahal- Budhil- Chamera III- Chamera PS 220 kV line as an interim arrangement:



- 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) =  $H \times (1 - 0.0019) = 0.9981 \times H$
- HP injection = Bajoli Holi injection + Small Hydro Injection
- HP Injection = A-I

With regard to above arrangement, the Petitioners submitted that as required above, SPS is already commissioned and operational and is being presently utilised in evacuating 26 MW of power through the above system for the past one year without any difficulty being faced by anyone. Further, only a slight modification in SPS is required to trip BHHPL power and shall be carried out prior to commencement of evacuation. With regard to first right of usage, the Petitioners re-iterated that the first right shall lie with Budhil HEP in line with the Commission's Order dated 04.12.2020.

2.11. The Petitioners also submitted that after including the desired evacuation capacity (upto 86 MW) along with Budhil HEP capacity at 10% overload (77 MW) sums to 163 MW which is way below the transmission line capacity which is in excess of 200 MW. Further as November to March is lean season, the actual loading of the line will be way lower, therefore, there is no question of overloading even after adding power for evacuation from Bajoli Holi HEP. The Petitioners also submitted that the ambient temperature also would not be a constraint to the line loading due to its geographical location, as the average ambient temperate in the area is not recorded more than 36<sup>0</sup>C. Accordingly, the line is safe and suitable to the proposed evacuation resulting in utilisation of hydro generation capacities.

2.12. The Petitioners requested the Commission to allow the utilisation of the dedicated Transmission Line of Budhil HEP on the same terms of usage as specified by the Commission vide Order dated 04.12.2020 read with Suo-moto Order dated 30.06.2021.

### **3. Respondents' submissions**

3.1. The Commission forwarded the copy of the Petition to M/s Greenko, SLDC and UPCL for comments latest by 12.11.2021 and fixed a hearing on 16.11.2021. Subsequently, SLDC vide its letter dated 12.11.2021 submitted that it does not have any comments to offer on the subject matter. M/s Greenko vide letter dated 15.11.2021 requested the Commission to allow time extension till 30.11.2021 for submission of comments as certain issues have been faced during last one year. Further, UPCL vide letter dated 12.11.2021 which was received on 25.11.2021 requested the Commission to allow additional time of 15 days for filing the reply in the matter. The Commission heard the matter on 16.11.2021 and vide Order dated 16.11.2021, as final opportunity, directed the Respondents to submit their reply by 30.11.2021 with a copy to the Petitioners and the Petitioners were directed to submit their rejoinder by 07.12.2021. Further, the Commission also ordered that till further Orders in the matters, the terms and conditions specified by the Commission vide Order dated 04.12.2020 and Suo-moto Order dated 30.06.2021 shall continue to remain in force.

3.2. In the matter, M/s Greenko vide its letter dated 30.11.2021 requested the Commission to consider the issues of 'treatment of transmission losses', 'Deviation Settlement Mechanism (DSM)', "backing down of the HPSEB's plant in the event of contingency' and 'impact of

any revision in schedule by the said SHPs on the power drawl entitlement of UPCL'.

- 3.3. M/s Greenko also submitted that it has off-late faced serious operational issues which have been deliberately ignored by the stakeholders without reflecting upon the accountability and responsibility to ensure a seamless evacuation arrangement in terms of the Commission's directions issued vide Order dated 04.12.2020. In this regard, it is submitted that the Lahal Sub-station which has been commissioned and connected to the 220 kV dedicated Transmission Line of Budhil HEP, has witnessed more than 20 trippings giving rise to operational issues in evacuation of power.
- 3.4. M/s Greenko submitted that on account of such operation issues arising in frequent succession sans any accountability of the stakeholders, M/s Greenko has on several occasions not been able to avail the charging codes. In order to address the aforesaid operational issues, M/s Greenko was forced to undertake rectification measures at its own risk and cost so as to ensure an efficient and reliable evacuation arrangement. The said issue was duly brought to the notice of HPPTCL and HPSEBL. Further, in the absence of any response and corrective measures, M/s Greenko was constrained to approach NRLDC. M/s Greenko also submitted the copies of letters sent to the concerned parties in the matter.
- 3.5. M/s Greenko submitted that in terms of the interim arrangement approved by the Commission, the first right of use has been vested with M/s Greenko and in the event of any contingency arising on account of the usage of the dedicated Transmission Line, HPPTCL has also agreed to bear any incremental losses due to such arrangement. M/s Greenko submitted that it is required to undertake routine or emergent maintenance of the subject transmission line. However, HPPTCL and HPSEBL neither accords its consent nor responds to such eventualities even upon a requisition by NRLDC and NRPC. This gives rise to an uncertainty in the event of fixing accountability qua generation loss of the generating units with whom the said Petitioners have entered into a power purchase agreement. It is mostly humbly submitted that the timely and routine maintenance of the transmission line in emergent situation is unavoidably a necessary task to be undertaken to ensure an efficient and reliable transmission arrangement.
- 3.6. M/s Greenko submitted that HPPTCL has commissioned and charged 220 kV Transmission Line from Lahal towards Bajoli Holi HEP, sharing only the commissioning

details with it. However, HPPTCL has failed to share the details of the project which shall be utilizing the subject transmission line. M/s Greenko submitted that any disturbances and unseen outages, on account of the usage of dedicated Transmission Line shall have an adverse impact on the operational requirements of Budhil HEP which may lead to generation loss. Furthermore, to ensure and comply with the grid security measures, it is extremely important for the Petitioners to relay data with regard to tripping of any of the generating units/ load centers connected to the dedicated Transmission Line in a timely and reliable manner, so as to ensure system restoration. However, the aforesaid eventualities are neither contemplated by the Petitioners at the time of meeting its evacuation arrangement nor shared with Budhil HEP for a safe and reliable transmission of power.

- 3.7. M/s Greenko requested the Commission to issue appropriate directions and fix appropriate liability on the concerned entities and stakeholders who have been allowed to use the dedicated Transmission Line on an interim evacuation arrangement basis, so as to avoid any disturbance in the operation requirements leading to unseen outages and consequential generation loss. M/s Greenko further requested to issue directions terminating the aforesaid interim arrangement in the event of any extreme eventuality so as to avoid any further damages/ losses to the grid and Budhil HEP's evacuation requirement in terms of the definite Power Purchase Agreement (PPA) entered into with UPCL.

In view of the above, M/s Greenko requested the Commission to issue appropriate directions in continuation of Orders dated 04.12.2020 & Suo-moto Order 30.6.2021 and further fix responsibility & appropriate liability on all concerned entities using / proposed to use the Budhil HEP's 220 kV dedicated Transmission Line so as to avoid any disturbance on the normal operations and unseen outages of Budhil HEP and consequential generation losses / DSM losses to it and allow discontinuance of interim power evacuation in extreme hcases to prevent any further damage to grid safety to Budhil HEP and UPCL.

- 3.8. UPCL vide its letter dated 30.11.2021 submitted that Bajoli Holi HEP was not a party in the earlier Petitions and hence terms & conditions settled by the Commission vide Order dated 04.12.2021 and Suo-moto Order dated 30.06.2021 do not apply. UPCL submitted that the Petitioners have not provided any information regarding the status of actual evacuation

arrangement or the reasons due to which it has not completed.

- 3.9. UPCL submitted that in earlier orders only 26 MW capacity was considered for interim arrangement and in the present Petition, the Petitioners are further proposing to add 60 MW RTC from Bajoli Holi HEP. Further, M/s Greenko while evacuating 26 MW power faced problem and has shown its inability to make any possible correction due to the act of HPPTCL and HPSEBL, additional 60 MW would infact collapse the whole system especially keeping in mind that the installed capacity of Bajoli Holi HEP is 180 MW.
- 3.10. UPCL submitted that UPCL and M/s Greenko raised objection on the request of the Petitioners, therefore, the Petition is not maintainable, and the Commission does not have jurisdiction to consider the Petition of the plant situated outside the State of Uttarakhand. UPCL also submitted that M/s Greenko is facing difficulties and no payment till date of whatever nature has been received so far, therefore, before taking up the matter, HPPTCL and HPSEBL be directed to make complete payment together with LPS w.r.t. past utilisation of the dedicated transmission line.
- 3.11. UPCL requested the Commission not to extend terms and conditions for usage of dedicated Transmission Line of Budhil HEP by HPPTCL and HPSEBL as the Commission has already given sufficient time to HPPCL & HPSEBL and they cannot continue to take such benefits for their inefficiency. The evacuation of power of this quantum cannot be done by an interim arrangement, the arrangement was given considering the urgency of the situation however the very fact that even after so many months they have failed to commission the concerned evacuation system which clearly shows lapses on the Petitioners' part and the consequences of the same shall be borne by them as per the agreed terms and conditions between the Petitioners. UPCL also submitted that the Petitioners are trying to evade the commercial implication arising out of their failure at the cost of UPCL.

#### **4. Petitioners' rejoinder**

- 4.1. The copy of the replies submitted by M/s Greenko and UPCL were forwarded to the Petitioners for comments. In the matter, the Petitioners have submitted rejoinder vide letter dated 07.1.2021 and letter dated 22.12.2021.
- 4.2. With regard to M/s Greenko's comment on treatment of transmission losses, DSM losses, backing down of HPSEBL plants in the event of contingency and impact of any revision in

schedule by SHP of Himachal Pradesh on the entitlement of UPCL on power drawl, the Petitioners submitted that these issues have already been considered and addressed by the Commission vide Order dated 04.12.2020 and Suo-moto Order dated 30.06.2021. The Petitioners submitted that first priority of power evacuation through the existing lines is of Budhil HEP and in case of any contingency, Himachal Pradesh power shall be backed down first and an SPS system is already operational. Further, necessary modifications have already been done at Bajoli Holi HEP to include Bajoli Holi Power.

- 4.3. With regard to M/s Greenko's comment on unwanted tripping faced at Budhil HEP end on account of power flow from 220 kV Lahal-Budhil Line, the Petitioners denied the allegations and submitted that HPPTCL promptly acted and clarified that 33 kV line fault was precisely sensed and cleared by the feeder protection switchgear. However, at the same time tripping also occurred at Budhil end. The Bus-bar protection relay has operated at Budhil HEP end which tripped 220 kV circuit breaker of Budhil-Chamera line only. The breaker of Budhil-Lahal line has not tripped. It was clarified that in in case of operation of Bus Bar protection, all the 220 kV circuit breakers connected to the same bus should have operated. It is a well-established fact that Bus Bar fault shall not have any impact for any through fault shall not have any impact for any through fault anywhere up-stream or down-stream and the relay should be stable for all the through faults which clearly indicate the mal-operation of Bus bar protection relay at Budhil HEP and the same needs to be analysed and if required, the relay setting needs to be reviewed and corrected.
- 4.4. With regard to M/s Greenko's comment on not sharing the details of projects using 220 kV Lahal-Budhil Transmission Lines, the Petitioners submitted that 220 kV D/C Transmission Line from Lahal to Bajoli Holi HEP was in advance stage of construction at the time of filing present Petition and the said transmission line has been commissioned in November, 2021 and Bajoli Holi HEP is in advance Stage and about to be commissioned shortly. The Petitioner submitted that as recorded in the meeting held with CEA on 17.06.2021, minor modification in the SPS was required and modified SPS logic was agreed in 189<sup>th</sup> meeting of Operation Co-ordination Sub-Committee held on 23.11.2021. Further, the required modification in SPS has already been done to include Bajoli Holi HEP power and therefore, in case of any contingency HP power shall be backed down first. The Petitioner submitted that all necessary technical requirement including but not limited to relay, data



communication are in place and only after ensuring such compliance transmission system can achieve CoD.

- 4.5. UPCL has submitted that BHHPL was not a party to the earlier Petition and earlier Order was time specific and has elapsed. In this regard, the Petitioners submitted that the issue raised by UPCL has already been considered and addressed by the Commission vide Order dated 04.12.2020 in Petition no. 31 of 2020. The Commission vide said Order has clarified that the permission for utilisation of the proposed interim arrangement after 30.09.2021 by all the future beneficiary(ies) on the same terms of use will be dealt separately based on the future Petition. Further, in the current Petition, the Petitioners have agreed to the directions which have already been issued by the Commission vide Order dated 04.12.2020 and suo-moto Order dated 30.06.2021 and a new beneficiary has been added requesting for utilisation of dedicated transmission line on the same terms of use as specified by the Commission.
- 4.6. With regard to UPCL's comment on non-disclosure of material facts w.r.t. status of the actual evacuation arrangement or reasons due to which it has not been completed, the Petitioners submitted that all the relevant documents have already been provided with the Petition. Further, the reason for delay in construction of 400 kV D/C Twin Moose Transmission Line which was due to abnormal rainfall and due to unprecedented outbreak of COVID-19 pandemic in 2021 has already been mentioned in the Petition and also reiterated during hearing.
- 4.7. With regard to UPCL's comment on collapse of whole system once the power of Bajoli Holi HEP is also transmitted from dedicated Transmission Line of Budhil HEP alongwith 26 MW power of SHPs, the Petitioners submitted that proposed evacuation of power has already been discussed in the meeting held with CEA dated 17.06.2021. Further, as discussed in the said meeting, SPS is already commissioned and operational and is being presently utilised in evacuating 26 MW of power for the past one year. Further, after including the desired evacuation capacity upto 60 MW of Bajoli Holi HEP, 26 MW of SHPs, the power can be evacuated from the dedicated transmission line as the line capacity is more than the total capacity to be transmitted.
- 4.8. With regard to UPCL's comment on the jurisdiction of the Commission, the Petitioners

submitted that the Commission vide Order dated 04.12.2020 has already dealt with the issue.

- 4.9. With regard to UPCL's comment on difficulties and non-receipt of payment towards utilisation of dedicated Transmission Line of Budhil HEP, the Petitioners submitted that UPCL has not provided any supporting facts in the matter and M/s Greenko has not made any submission in this regard and UPCL without verifying the facts has made incorrect submission before the Commission.
- 4.10. With regard to UPCL's comment on non-continuation of the present interim arrangement and not permitting any other generators, the Petitioners submitted that the contention raised by UPCL is baseless and without any supporting facts. M/s Greenko, the owner of the dedicated Transmission Line has not made any submission to stop the present arrangement and has neither made any submission to deny evacuation of power from Bajoli Holi HEP.
- 4.11. With regard to UPCL's comment on disagreement in continuing with the present evacuation on the premises that the arrangement is at the cost of UPCL, the Petitioners submitted that UPCL has not divulged any specifics to establish that the present evacuation is at its costs. On the contrary, UPLC is the sole beneficiary of the proposed evacuation arrangement as the collected transmission charges will go on to reduce the power purchase cost.

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

- 5.1. The present Petition has been filed jointly by HPPTCL, HPSEBL and BHHPL under Section 64(5) of the Act, in the manner specified in Regulation 10 of UERC (Conduct of Business) Regulations, 2014 seeking approval of the Commission for utilisation of 220 kV S/C dedicated Transmission Line of Budhil HEP for evacuation of power from SHPs operating in Ravi Basin, Himachal Pradesh and from BHHPL 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 till 31.03.2022 or upto commissioning of 400 kV D/C Transmission Line whichever is earlier on the same terms of use as decided by the Commission vide Order dated 04.12.2020 read with Order dated 30.06.2021.

5.2. The Commission has considered the submissions of HPPTCL, HPSEBL, M/s Greenko and UPCL. The Petitioners requested the Commission to allow usage of dedicated Transmission Line of M/s Greenko for evacuation of power upto 26 MW and 60 MW of Bajoli Holi HEP on the same terms and condition as determined by the Commission vide its Order dated 04.12.2020 and Suo-moto Order dated 30.06.2021 for evacuation of power upto 26 MW from the SHPs situated in Himachal Pradesh.

In the matter, M/s Greenko had once again expressed its concern over the issues of treatment of transmission line losses, DSM losses, backing down of HPSEBL's plants in case of contingency and impact of any revision in schedule by SHPs of Himachal Pradesh on the power drawl entitlement of UPCL. Apart from this M/s Greenko raised an issue regarding tripping of dedicated Transmission Line on account of power supply from Lahal end.

Further, UPCL raised its concern over the issue of jurisdiction of the Commission, status of actual evacuation arrangement, reasons for additional evacuation of 60 MW RTC from Bajoli Holi HEP, unauthorised evacuation of power after 30.09.2020 alongwith other issues.

5.3. The Commission heard all the parties and carefully considered their written submissions. The Commission has critically analysed the issues raised by the Petitioners, UPCL and M/s Greenko. 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.

5.4. With regard the comments on jurisdiction of the Commission, transmission line losses, Deviation Settlement Mechanism (DSM) losses, backing down of HPSEBL's plants in case of contingency and impact of any revision in schedule by SHPs of Himachal Pradesh on the power drawl entitlement of UPCL, it is pertinent to mention that the Commission has already dealt with the issues vide its Order dated 04.12.2020 in Petition no. 31 of 2020. Accordingly, the Commission does not find it prudent to reiterate the issues which have already been dealt in aforesaid orders.

5.5. UPCL submitted that Bajoli Holi HEP was not party in earlier Petition and terms & conditions specified vide Order dated 04.12.2020 shall not be applicable on Bajoli Holi HEP. Here it is pertinent to mention that the Commission vide Order dated 04.12.2020 had

specifically mentioned that a Petition shall be filed before the Commission for permission for utilisation of the proposed interim arrangement. The relevant extract of the said Order is as follows:

*“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).**”*

Further, in the present Petition, the Petitioners have jointly sought permission of the Commission to extend the interim arrangement for the evacuation of power from SHPs of Himachal Pradesh for which permission had been allowed by the Commission vide Order dated 04.12.2020 and also evacuation of power of Bajoli Holi HEP upto 60 MW using the dedicated transmission line of Budhil HEP. The Petition has been filed in accordance with the directions of the Commission. Accordingly, the Commission does not find merit in this contention of UPCL.

5.6. UPCL has submitted that there is difficulty in exercising control over the utilities operating outside the state. In the matter, it is worth mentioning that UPCL is drawing electricity from Budhil HEP since December 2015 and has never raised an issue regarding complications faced by it except determination of NAPAF and applicability of incentives which has already been dealt by the Commission vide Order dated 18.12.2017 in Petition no. 12 of 2017. Further, UPCL has not mentioned how come it is facing difficulties in exercising its rights or loss of power from Budhil HEP due to evacuation of power of SHPs of Himachal Pradesh. Accordingly, the Commission does not find UPCL's comment tenable.

5.7. With regard to UPCL's comment on non-receipt of any amount from HPPTCL and HBSEBL

against the usage of dedicated transmission line, the Commission observed that UPCL has not provided any supporting facts in the matter and the Commission does not recognise the merits of the submission when M/s Greenko, owner of the dedicated transmission line, has not raised any issue w.r.t. dues/arrear against the utilisation of dedicated transmission line by SHPs situated in Himachal Pradesh for evacuation of power and benefits to UPCL will be passed and shown in the true-up Petitions of M/s Greenko for respective years.

5.8. With regard to UPCL's comment on evacuation of power of proposed quantum, delay in commissioning of the concerned evacuation system and evasion of commercial implication by the Petitioners arising out of their failure at the cost of UPCL, it is worth mentioning that a meeting was held on 03.01.2020 to discuss issues related to transmission system for evacuation of power from Bajoli Holi HEP of M/s GMR Energy Limited in Himachal Pradesh wherein UPCL was also a participant. In the meeting it was decided that the power from Bajoli Holi HEP and SHPs shall be evacuated from Lahal Pooling Sub-station to Chamera-III through Budhil HEP's dedicated Transmission line. The Commission observed that no objection was raised by UPCL in the meeting. Further, UPCL has failed to establish as to how such interim arrangement will affect it. Infact, UPCL is the sole beneficiary of the proposed interim arrangement as the collected transmission charges will go to reduce its power purchase cost.

5.9. With regard to M/s Greenko submission on the tripping of dedicated Transmission line on account of connectivity of dedicated Transmission line with Lahal Sub-station, the Commission has gone through the submission of the Petitioners as well as M/s Greenko. The Commission observed that M/s Greenko vide letter dated 27.04.2021 addressed to HPPTCL requested to pass necessary instructions to the concerned department for checking the Protection system of Lahal Sub-station including wiring from CTs & PTs to Relays, Relays to Breaker Tripping Circuits, proper configuration of Relays and BCU/BCPU units as unwanted tripping was being faced by Budhil HEP end after commissioning of Budhil-Lahal line. In reply HPPTCL vide its letter dated 29.04.2021 addressed to M/s Greenko informed that the 33 kV line fault was precisely sensed and cleared by the feeder protection switchgear. However, it is gathered that at the same time tripping also occurred at Budhil HEP end. The Bus-Bar protection relay has operated at Budhil HEP end which tripped 220 kV circuit breaker of Budhil-Chamera line only. The

breaker of Budhil-Lahal line did not trip. It is clarified in the letter that in case of operation of Bus Bar protection, all 220 kV circuit breaker connected to the same bus should have operated. Further, Bus Bar fault shall not have any impact whether upstream or downstream and the relay should be stable for all the through faults.

In the matter, M/s Greenko vide letter dated 14.05.2021 addressed to HPPTCL stated that Budhil GIS and power evacuation system was commissioned way back in 2012 and since then it was working satisfactorily with connection to NHPC Sub-station. However, the problem stated after awarding connection to Lahal Sub-station through a short 220 kV line as a temporary measure to facilitate evacuation of power from Lahal Sub-station. In past meetings held with HPPTCL, CEA and other stakeholders, HPPTCL agreed for making line and bay healthy at their own cost including any modification in line-2 bay or existing T&D part of GIS and protection system.

In the matter, the Commission observed from the correspondence done between the parties that the first tripping of Budhil-Lahal line happened in July 2020. However, no information in the matter was shared by M/s Greenko with the Commission. Further, the Commission also noticed that a meeting was held on 17.06.2021 among the officials of M/s Greenko, HPPTCL, CEA and M/s BHHPL regarding evacuation of power SHPs and Bajoli Holi HEP through dedicated transmission line of Budhil HEP. During the discussion regarding evacuation of power from SHPs of Himachal Pradesh and Bajoli Holi HEP after 30.09.2021, M/s Greenko only stated that the first right of evacuation of power shall be with it and did not raise any objections about the technical issues being faced by it in the past due to this interim arrangement. In the matter, the Commission directs that based on the mutual agreement necessary up-gradation of sub-station elements including protection system may be carried out at Budhil HEP end or HPPTCL/Bajoli Holi HEP end for smooth evacuation of power at the cost of HPPTCL/Bajoli Holi HEP.

5.10. Based on the above discussions, the Commission permits utilisation of 200 kV S/C dedicated Transmission Line of Budhil HEP for evacuating power from SHPs upto 26 MW and from Bajoli Holi HEP upto 60 MW only till 31.03.2022 as capacity of the Budhil line is limited on the same terms of use as approved by the Commission vide Order dated 04.12.2021 in Petition no. 31 of 2020 read with Suo-moto Order dated 30.06.2021 in Petition no. 29 of 2021 (Suo-moto).

5.11. Further, the Petitioners are directed to make necessary modification in SPS so that power of SHPs and/or Bajoli Holi HEP can be backed down to avoid overloading of dedicated Transmission line of Budhil HEP. Furthermore, all the additional expenditures incurred or to be incurred by M/s Greenko pertaining to interim arrangement for evacuation of incremental power of upto 60 MW of Bajoli Holi HEP shall be borne by the Petitioners.

6. Ordered accordingly.

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

**(D.P. Gairola)**  
**Member (Law)- Chairman (I/c)**