

Together, Let us light up our lives

ଓଡ଼ିଶା ବିଦ୍ୟୁତ ନିୟାମକ ଆୟୋଗ

ODISHA ELECTRICITY REGULATORY COMMISSION BIDYUT NIYAMAK BHAWAN PLOT NO.4, CHUNOKOLI, SHAILASHREE VIHAR,

BHUBANESWAR -751021 TEL. No. 2721048, 2721049

E-MAIL: oerc@odisha.gov.in/orierc@gmail.com

WEBSITE: www.orierc.org

Present : Shri P. K. Jena, Chairperson

Shri G. Mohapatra, Member

Shri S. K. Ray Mohapatra, Member

Case No. 01/2025

M/s. GRIDCO Ltd. Petitioner

Vrs.

M/s. NHPC Ltd.& Others Respondents

In the matter of: Application of GRIDCO Ltd. seeking approval for signing of PPA with

CVPPL (Chenab Valley Power Projects Limited) a joint Venture Company of NHPC Limited and Jammu & Kashmir State Power Development Corporation (JKSPDC) towards the procurement of power as per allocation by MoP, Gol from Kiru Hydro Electric Project

(624 MW: 4x156 MW) located in UT of J&K.

For Petitioner: Ms. Murchhana Dhar, DGM (Ele.), GRIDCO

Respondent: Shri K.C. Nanda, Sr. GM (RA & Strategy), TPWODL, Shri Soumitry Dey,

Head Regulatory, TPSODL, Ms. Malancha Ghose, Addl. Chief Engineer (RA), TPNODL, Shri Bharat Bhadawat, Chief-Regulatory, Enforcement & Legal, TPCODL, Ms. Sonali Pattanaik, Manager (Legal), DoE, Government of Odisha, the Representative of M/s. NHPC Ltd., Faridabad and the

Representative of OPTCL.

ORDER

Date of hearing: 29.04.2025 Date of Order:14.05.2025

The Petitioner-M/s. GRIDCO Ltd. has filed the present petition under Section 86 (1)(b) of the Electricity Act, 2003, read with Section 21 of the Orissa Electricity Reform Act, 1995 and other enabling provisions as well as the letter of the OERC dated 19.01.2021 seeking approval to execute Power Purchase Agreement (PPA) between M/s. GRIDCO Limited (GRIDCO) and M/s. Chenab Valley Power Projects Limited (CVPPL) a joint Venture Company of NHPC Limited and Jammu & Kashmir State Power Development Corporation (JKSPDC) (JV of NHPC), towards the procurement of power as per allocation by the Ministry of Power (MoP), Government of Odisha (GoI) from Kiru Hydro Electric Project(4x156 = 624 MW) located in UT of J&K.

Submissions of the Petitioner:

- 2. In support of its prayer, the Petitioner (GRIDCO) has submitted as under:
 - a) The Respondent, M/s NHPC, is developing the Kiru Hydro Electric Project (HEP) in the Union Territory of Jammu & Kashmir through its Joint Venture (JV) subsidiary Company i.e. "Chenab Valley Power Projects Limited (CVPPL)". CVPPL is a JV company incorporated jointly by NHPC and Jammu & Kashmir State Power Development Corporation Ltd. (JKSPDCL), holding equity shares in the ratio of 51% (NHPC) and 49% (JKSPDCL), respectively.
 - b) That. NHPC have come up with a proposal for the procurement of hydro power from the said upcoming Hydro Electric Project located in the UT of J&K. NHPC is seeking prospective buyers to tie up hydro power from Kiru HEP on long-term PPA basis. In response to this, GRIDCO placed this matter in the 42nd Committee of Directors (CoD) meeting held on 14.10.2023 for deliberation. After detailed deliberation, the Committee recommended to issue in principle consent to NHPC for the procurement of 100 MW of power from the upcoming Kiru Hydro Electric Project. Accordingly, GRIDCO has given its in-principle consent to NHPC for the procurement of 100 MW of power from the upcoming 624 MW Kiru Hydro Electric Project.
 - c) Further, in response to a query raised by GRIDCO, it has informed that the expected commissioning date of the Kiru Hydro Electric Project is September 2026.
 - d) Pursuant to detailed discussions and deliberations, NHPC has submitted a mutually agreed draft PPA to be executed between NHPC and GRIDCO Ltd. for procurement of power from the Kiru Hydro Electric Project (KHEP). The salient features of the Kiru HEP are as follows:
 - i. Installed Capacity: 624 MW (4x156 MW)
 - ii. Type of Project: Run of River having 2.7 Hrs Peaking
 - iii. Expected Commissioning: September 2026
 - iv. Available Power for sale: 543 MW
 - v. Levelised Tariff: Rs.4.64/Unit
 - vi. Annual Design Energy: 2272 MU
 - vii. Useful Life: 40 Years
 - viii. Transmission Connectivity: ISTS Connectivity
 - ix. Actual Tariff: Tariff/Annual Fixed Charges (AFC) shall be determined by CERC under Section 62 of the Electricity Act, 2003.

- x. Power Allocation: Allocation among State/DISCOMs is to be done by the Ministry of Power (MoP), Government of India (GOI), based on consent/PPA signed with States/DISCOMs.
- e) In accordance with the Notifications/Orders issued by the Ministry of Power, Government of India, dated 8th March 2019, 29th January 2021, and 22nd July 2022, the hydro power generated from the said project qualifies for meeting the Hydro Purchase Obligation (HPO). Additionally, to promote expeditious capacity addition of Hydro Power Projects, the Ministry of Power vide its Order dated 1st December 2022 and as per the Central Electricity Regulatory Commission (Sharing of Interstate Transmission Charges and Losses), First Amendment Regulations, 2023, has stipulated that:

"There will be 100% waiver of ISTS charges for the transmission of power from Hydro Power Projects where construction work is awarded and PPAs are signed on or after 01.12.2022 but on or before 30.06.2025 for a period of 18 years from the date of COD of the Hydro Generating Station."

- f) The expected Commercial Operation Date (CoD) of the Kiru Hydro Electric Project (HEP) is March 2026. Accordingly, if GRIDCO executes the Power Purchase Agreement (PPA) with NHPC for procurement of power from the Kiru HEP on or before 30.06.2025, 100% waiver of Interstate Transmission System (ISTS) charges shall be applicable for a period of 18 years from the date of CoD of the said project, in accordance with the prevailing regulatory framework. This benefit shall remain available even in the event of a delay in the scheduled commissioning of the project, thereby offering a significant financial advantage.
- g) As per the Draft Discussion Paper for the determination of generic tariff and norms with respect to Renewable Power Projects in the State of Odisha dated. 20.07.2023 for the fourth Control Period, i.e. from FY-2023-24 to FY-2025-26, the Levelised Tariff of Small Hydro Electric Projects (SHEPs) below 5 MW would be Rs.5.84/kWh and that of SHEPs of 5 to 25 MW capacity would be Rs.5.76/kWh. In this respect, the indicative levelised tariff of Rs. 4.64/kWh for the Kiru Hydro Electric Project seems to be quite competitive.
- h) GRIDCO has submitted the latest Renewable Energy (RE) capacity requirements (in MW) necessary for meeting its Renewable Purchase Obligation (RPO) targets and has further stated that the Hydro Purchase Obligation (HPO) may also be fulfilled through Wind Power Projects (WPPs) commissioned after 31.03.2022 through fungibility and the energy rate of WPPs is usually less than Hydro Electric Projects (HEPs). However, the power supply from WPPs is erratic in nature, and so having large capacity of wind

- power in the energy would make it very difficult to maintain proper load-generation balance on real-time basis. Conversely, hydro power projects provide reliable power supply with peak load support. Therefore, an ideal energy mix should always contain appropriate proportion of thermal, hydro, and other renewable energy sources.
- i) GRIDCO has submitted the LGBR prepared for Peak Power Supply Demand as well as Annual Average Power Supply Demand till FY 2047-48 and stated that there would be a deficit in power for meeting the Peak Demand of the State, although there would be surplus power for meeting the average demand of the State. The prudent procurement planning of a state always depends on meeting the peak requirement.
- j) At present, very few options are available for large hydro projects, and if GRIDCO lets go of this opportunity, then there is a possibility that future hydro power projects may be of higher cost. Further, having adequate Hydro Power in the generation mix is crucial due to the large-scale integration of Variable Renewable Energy sources.
- k) As per the Commission's Letter No.OERC//RA/GRIDCO-06/2013/114 dated 19.01.2021, prior approval of the Commission is required before entering into any long/medium-term PPA. Therefore, GRIDCO has prayed before the Commission to give necessary approval for the signing of the Power Purchase Agreement (PPA) to be executed between CVPPL (JV of NHPC) and GRIDCO Ltd. for the procurement of power as per the allocation made by Ministry of Power (MoP), Government of India (GoI), in favor of the State of Odisha from Kiru Hydro Electric Project, Jammu and Kashmir (624 MW).

Submissions of the Respondents:

- 3. The respondent TPWODL has submitted the following:
 - a) That, as per the terms of the Vesting Order of TPWODL (Case No. 82/2020 dated 28.12.2020), prior to signing additional PPAs with generators, GRIDCO is required to consult with TPWODL, other retail supply licensees in the State, and obtain the prior approval of the Commission. Such consultation is also necessary when GRIDCO signs any PPAs to procure power from renewable energy sources to meet its Renewable Purchase Obligation targets set under the regulations and orders of the Commission. In accordance with the above, TPWODL has extended its consent for the execution of PPAs whenever sought by GRIDCO. However, in the present instance, GRIDCO has not formally sought consent from the Licensee prior to filing the instant application. Notwithstanding this, through this submission, the Licensee respectfully conveys its consent for the execution of the proposed PPA with CVPPL towards procurement of

- 100MW of Hydro power as per allocation by MoP, Gol from Kiru Hydro Electric Project (4X156=624MW) located at UT of J&K.
- b) Timely execution of the PPA will be beneficial for the state power sector, ensuring long-term renewable power availability at a competitive tariff while fulfilling regulatory obligations.
- 4. The respondent TPNODL has submitted the following:
 - a) The timely execution of the PPA will be beneficial for the state power sector, ensuring long-term renewable power availability at a competitive tariff and meeting the HPO compliance will be the additional advantage.
- 5. The respondent TPCODL has submitted the following:
 - a) The Petitioner, GRIDCO, has assumed a very low growth rate for FY 2025-26 to FY 2028-29 while estimating the energy demand. In view of this, it is requested to use a more realistic growth rate assumption for its analysis.
 - The petitioner may provide the details of all capacity tie-up proposals for Wind and Hydro projects with Commercial Operation Date (COD) beyond 31.03.2024, including projects which are already approved, submitted for approval and proposed to be submitted. This is to enable the Commission to have a comprehensive view for making an informed and holistic decision. The Commission may also take into account upcoming Wind and Hydro projects within the State, as procurement from such sources may be necessary and could prove to be cost-effective, given the potential savings in transmission costs and losses in comparison to projects located in other regions of the country.
 - The tariff seems to be on the bit higher side, however, the waiver of Inter-State Transmission System (ISTS) charges may render the landed tariff reasonable. In this regard, the Petitioner may submit a detailed comparative analysis to substantiate the impact of such waiver on the overall tariff.
 - d) The OERC draft Regulations stipulate shortfall in Wind Renewable Energy Consumption in a year can be met with Hydro Renewable Energy, which is in excess in that year and vice versa. This clause makes adding more Wind Power as preferred choice, given tariffs for wind projects are lower than hydro projects. However, the erratic nature of Wind power needs to be considered and a balanced approach needs to be adopted.

- e) The OERC draft regulations provided flexibility in terms of fungibility of power for meeting the RPO target. In this regard a detailed scenario analysis needs to carried out to ensure that an optimal power portfolio is tied up for the state so that not only there is lesser burden on the consumers (i.e. projects with lower tariff are tied up) but also reliable power sources are tied up so that power is available for the state as and when required.
- 6. The respondent TPSODL has submitted the following:
 - a) As per the terms of the Vesting Order of TPSODL (Case No. 83/2020 dated 28.12.2020), prior to signing additional PPAs with generators, GRIDCO is required to consult with TPSODL, other retail supply Licensees in the State, and obtain the prior approval of the Commission. Such consultation is also necessary when GRIDCO signs any PPAs to procure power from renewable energy sources to meet its Renewable Purchase Obligation targets set under the regulations and orders of the Commission. In accordance with the above, TPSODL has extended its consent for the execution of PPAs whenever sought by GRIDCO. However, in the present instance, GRIDCO has not formally sought consent from the Licensee prior to filing the instant application. Notwithstanding this, through this submission, the Licensee respectfully conveys its consent for the execution of the proposed PPA with CVPPL for the procurement of 100 MW of Hydro power from Kiru HEP.
 - b) That, timely execution of the PPA will be beneficial for the state power sector, ensuring long-term renewable power availability at a competitive tariff while fulfilling regulatory obligations.
- 7. Odisha Power Transmission Corporation Ltd. (OPTCL) and the Department of Energy, Government of Odisha have no objection against the proposal.
- 8. A public notice was issued by the Commission, inviting suggestions/ objections from Respondents. The public hearing on the above matter was held on 29.04.2025 through hybrid arrangement (virtual/physical). The Commission heard the Petitioner and Respondents through virtual mode and considered their written submissions & arguments. The Commission observes that:
 - a) M/s NHPC is undertaking the development of the Kiru Hydro Electric Project (4x156 MW) in the Union Territory of Jammu & Kashmir through its Joint Venture (JV) subsidiary, Chenab Valley Power Projects Limited (CVPPL). CVPPL is a Joint

- Venture company incorporated jointly by NHPC and Jammu & Kashmir State Power Development Corporation Limited (JKSPDCL), with NHPC and JKSPDCL holding equity shares in the ratio of 51:49, respectively.
- In response to NHPC's proposal seeking long-term Power Purchase Agreement (PPA) with prospective buyers for procurement of the hydro power generated from the Kiru Hydro Electric Project, GRIDCO, based on the recommendation of its 42nd Committee of Directors (CoD), has issued an in-principle consent for the procurement of 100 MW of power from the said project. Further, it has been informed that the expected commissioning date of the Kiru Hydro Electric Project is September 2026.
- c) The hydro power generated from the said project qualifies for meeting the Hydro Purchase Obligation (HPO) targets as per notification (dated 08.03.2019, 29.01.2021 & 22.07.2022) of the Ministry of Power (MoP), Government of India (GoI).
- The expected Commercial Operation Date (COD) of the Kiru Hydro Electric Project (HEP) is September 2026. However, if GRIDCO executes the Power Purchase Agreement (PPA) with NHPC for procurement of power from the Kiru HEP on or before 30.06.2025, 100% waiver of Inter-State Transmission System (ISTS) charges shall be applicable for a period of 18 years from the COD of the said project, in accordance with the prevailing regulatory framework. This benefit shall remain available even in the event of a delay in the scheduled commissioning of the project, thereby offering a significant financial advantage.
- e) The indicative levelized tariff of Kiru Hydro Power Project would be Rs.4.64/kWh.
- All four distribution licensees (TPWODL, TPCODL, TPNODL and TPSODL) have expressed their concurrence to GRIDCO's procurement of power from the Kiru Hydro Electric Project (HEP), noting that such procurement would contribute towards meeting the State's Renewable Purchase Obligation (RPO) targets. The licensees have also emphasised the need for the timely execution of the Power Purchase Agreement (PPA), highlighting that it would be beneficial to the State's power sector by ensuring long-term availability of renewable power at a competitive tariff while fulfilling statutory and regulatory mandates. The Government of Odisha & OPTCL also have no objection to the proposal.
- g) The terms & conditions of the Power Purchase Agreement (PPA) for procurement of power from the Kiru Hydro Electric Project, as submitted by GRIDCO for the

Commission's approval, have been mutually agreed upon by both parties, namely M/s GRIDCO Ltd. and M/s. NHPC (through its Joint Venture, Chenab Valley Power Projects Limited – CVPPL).

9. The salient features of PPA are as follows:

- a) This Power Purchase Agreement shall be between M/s GRIDCO Limited and Chenab Valley Power Projects Private Limited (CVPPL), a Joint Venture Company of NHPC Limited and Jammu and Kashmir State Power Development Corporation (JKSPDC).
- b) The installed capacity of Kiru HE Project is 624 MW (4x156 MW). The installed capacity is, however, subject to derating/uprating of the generating units as determined from time to time by CEA or any other agency authorized to do so by the Ministry of Power (MOP), Government of India (GoI).
- c) The allocation of power from the CVPPPL Station amongst the Bulk Power Customer shall be in accordance with the instructions regarding allocation of power issued by the MOP, Government of India, from time to time.
- d) Metering arrangements including its installation, testing, operation, maintenance, collection, transportation and processing of data required for energy exchange shall be governed in accordance with Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, its amendment from time to time and as per the notification/directives issued/ to be issued by CERC from time to time and the relevant provisions contained in IEGC as amended from time to time.
- e) The quantum of energy sold to the GRIDCO out of the energy available for sale shall be the energy as indicated in the REAs issued by RPC/RLDC. The REA, including amendments, if any, as issued by RPC/RLDC, shall form the basis for billing purposes and shall be binding on both parties.
- f) The tariff to be charged & its associated Terms and Conditions for the energy to be supplied from the CVPPPL Station(s) shall be as per Tariff Notifications / orders / directions issued / to be issued by CERC from time to time under Electricity Act, 2003 and /or any other Act/Regulations as may be substituted by Government of India in place of these provisions.
- g) Payment of bill(s) for supply of power from the CVPPPL Station(s) may be made by the GRIDCO through RTGS/NEFT or through a confirmed. revolving, irrevocable Letter of Credit (LC) to be established in favour of CVPPPL for an amount equivalent

- to 105 percent of their average monthly billing of the preceding 12 months with the appropriate bank as mutually acceptable to the parties. The LC shall be kept valid at all times during the validity of this Agreement or the extended period. The amount of LC shall be reviewed annually.
- h) However, after the issue of the revised tariff order of the CVPPPL Stations, the LC shall be renewed for an amount equivalent to 105% of the average monthly billing of the preceding 12 months based on the revised tariff of the respective year. CVPPPL shall intimate the revised amount of the LC one month in advance. If the amount of the energy supply bill is more than the amount of LC, the payment of the excess amount shall be made by the GRIDCO directly on presentation of such bill(s). All the bank charges shall be borne by the Bulk Power Customer.
- i) The provision for levy of surcharge and rebate shall be governed as per notification/ directives/guidelines issued/to be issued by CERC/ GoI from time to time or any other Rebate Scheme as mutually agreed upon from time to time as per prevailing statutes and same shall form an integral part of this Agreement.
- j) Both CVPPPL and GRIDCO acknowledge that all payments made against all Bills in the quarter shall be subject to quarterly reconciliation at the beginning of the following quarter to take into account the adjustment of payments, Rebate, Late Payment Surcharge etc., to determine the outstanding dues, if any. Both CVPPPL and GRIDCO, therefore, agree that as soon as all such data in respect of any quarter has been finally verified and payment adjusted, CVPPPL and GRIDCO shall jointly sign such reconciliation statement. Any dispute with regard to the above reconciliation shall be dealt with in accordance with the provisions of this Agreement.
- k) This Agreement shall come into force from the date of signing and shall remain operative for 40 (Forty) years from the date of commercial operation of the last unit or balance normative life of CVPPPL Station(s) whichever is earlier. However, during currency of agreement, if any Tariff notifications/orders/regulation/ directions are issued by CERC/ Govt. of India/State Govt or any competent authority, the same shall be acceptable and binding on both parties.
- 10. The State of Odisha is presently surplus in terms of availability of energy, but there is deficit in meeting peak power demand. The trend of rapid increase in the share of RE power, which is uncontrollable/intermittent power in the generation portfolio, is becoming a matter of

concern in the absence of adequate Energy Storage Systems (ESS) due to the variability and intermittent nature of RE power. Adequate share of power from non-intermittent sources like nuclear, hydro or fossil fuel sources to manage the grid on real-time basis is very much required. Hence, availability of more hydro power in the generation mix is the need of the hour to support smooth operation of the grid on real-time basis and meet peak power demand. In view of the above observations and considering the benefit of 100% waiver of ISTS charges & fungibility of Hydro Project, the Commission approves the proposed Power Purchase Agreement (PPA) to be executed between GRIDCO & CVPPPL (JV of M/s. NHPC Ltd) for procurement of 100 MW of power from Kiru Hydro Electric Project (624 MW) in Jammu and Kashmir (at indicative levelized tariff of Rs.4.64/kwh) as per allocation made by the Ministry of Power (MoP), Government of India (GoI) in favour of State of Odisha to meet the peak demand as well as the RPO target of the State.

11. The Case is accordingly disposed of with the observations stated above.

Sd/(S K Ray Mohapatra)
Member

Sd/(G Mohapatra)
Member

Sd/(P K Jena)
Chairperson