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ODISHA ELECTRICITY REGULATORY COMMISSION

BIDYUT NIYAMAK BHAWAN

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Present : Shri P. K. Jena, Chairperson

Shri G. Mohapatra, Member

Shri S. K. Ray Mohapatra, Member

Case No. 26/2025

M/s. GRIDCO Ltd. Petitioner

Vrs.

M/s. NHPC Ltd.& Others Respondents

In the matter of: Application of GRIDCO Limited 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 Hon'ble OERC dtd. 19.01.2021 seeking approval for signing of PPAs with LANCO Teesta Hydro Power Limited (wholly owned subsidiary unit of NHPC Limited) for Teesta-VI HEP (4X125MW=500 MW) located in Sikkim, with Ratle Hydro Electric Power Corporation (a JV Company of NHPC Ltd & JKSPDCL) for Ratle Hydro Electric Project (4 X 205MW+1 X30 MW=850 MW) located in Jammu & Kashmir and with NHPC Limited towards the procurement of power from Dibang Hydro Electric Project(12 X 240MW = 2880 MW) located in Arunachal Pradesh as per

allocation by MoP, GoI.

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: 17.05.2025

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 Hon'ble OERC dated 19.01.2021 seeking approval to execute the following Power Purchase Agreement (PPA):

- a) Between M/s. GRIDCO Limited (GRIDCO) and LANCO Teesta Hydro Power Limited (wholly owned subsidiary unit of NHPC Limited) for procuring power from Teesta-VI Hydro Electric Project (LTHPL) (4X125MW=500 MW) located in Sikkim.
- b) Between M/s. GRIDCO Limited (GRIDCO) and Ratle Hydro Electric Power Corporation (a JV Company of NHPC Ltd & JKSPDCL) for procuring power from Ratle Hydro Electric Project Limited (RHPCL) (4 X 205MW + 1 X30MW=850 MW) located in the Union Territory of Jammu & Kashmir.
- c) Between M/s. GRIDCO Limited (GRIDCO) and NHPC Limited for the procurement of power from the Dibang Multipurpose Project (12 X 240MW = 2880 MW) located in Arunachal Pradesh;

as per allocation by Ministry of Power (MoP), Govt. of Indian (GoI).

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 various Hydro Electric Projects such as Teesta-VI Hydro Electric Project (4X125MW=500 MW) in the State of Sikkim, Ratle Hydro Electric Project (4 X 205MW + 1 X30MW=850 MW) in the Union Territory of Jammu & Kashmir through the Joint Venture (JV) of NHPC Ltd. and Jammu & Kashmir State Power Development Corporation Ltd. (JKSPDCL) i.e. "Ratle Hydroelectric Power Corporation Limited" (RHPCL) and Dibang Multipurpose Project (12 X 240MW = 2880 MW) in the State of Arunachal Pradesh respectively.
 - b) The Respondent NHPC have come up with a proposal for the procurement of hydro power from the said upcoming Hydro Electric Projects located in Sikkim, UT of J&K and Arunachal Pradesh. NHPC is seeking prospective buyers to tie up hydro power from Teesta-VI Hydro Electric Project (LTHPL), Ratle Hydro Electric Project Limited (RHPCL) and Dibang HEP on long-term PPA basis. In response to this, as per the recommendation of the Committee of Directors (CoD) in its 40th meeting held on 25.07.2023, GRIDCO has given its in-principle consent to NHPC Ltd. for the procurement of 100 MW of power from the upcoming 500 MW Teesta-VI Hydro Electric Project (THEPL) and 100 MW of power from the upcoming 850 MW Ratle Hydro Electric Project Limited (RHPCL). Similarly, as per the recommendation of the Committee of Directors (CoD) in its 51st meeting held on 08.10.2024, GRIDCO has given

- its in-principle consent to NHPC Ltd. for the procurement of 200 MW of power from the upcoming 2880MW Dibang Multipurpose Project.
- c) Further, in response to a query raised by GRIDCO, NTPC has informed about the anticipated Commissioning date as follows:
 - i. Teesta-VI Hydro Electric Project- December 2027.
 - ii. Ratle Hydro Electric Project Limited (RHPCL)- December 2027.
 - iii. Dibang Multipurpose Project -

February 2032.

d) Pursuant to detailed discussions and deliberations, NHPC has submitted mutually agreed draft Power Purchase Agreements (PPAs) to be executed between NHPC and GRIDCO for the procurement of power from the following projects: Teesta-VI Hydro Electric Project (THEPL), Ratle Hydro Electric Project Limited (RHPCL) and Dibang Multipurpose Project. The salient features of these projects are outlined below:"

i. Teesta-VI Hydro Electric Project (THEPL):

- Installed Capacity:500 MW (4x125 MW)
- Type of Project: Run of River with Peaking 2.3 Hrs.
- Expected Commissioning: December 2027
- Annual Design Energy: 2400 MU
- Useful Life: 40 Years
- Transmission Connectivity: ISTS Connectivity
- Levelised Tariff: Rs.4.07/kWh
- Actual Tariff: Tariff/Annual Fixed Cost (AFC) shall be determined by CERC under Section 62 of the Electricity Act, 2003.
- Power Allocation: Allocation is to be done by the Ministry of Power (MoP),
 Government of India (GOI), based on consent received from the States/DISCOMs.

ii. Ratle Hydro Electric Project Limited (RHPCL):

- Installed Capacity:850 MW (4x205 MW + 1x30 MW)
- Type of Project: Run of River.
- Expected Commissioning: December 2027
- Annual Design Energy: 3136.76 MU
- Useful Life: 40 Years
- Transmission Connectivity: ISTS Connectivity
- Levelised Tariff: Rs.3.92/kWh

- Actual Tariff: Tariff/Annual Fixed Cost (AFC) shall be determined by CERC under Section 62 of the Electricity Act, 2003.
- Power Allocation: Allocation is to be done by the Ministry of Power (MoP), Government of India (GOI), based on consent received from the States/DISCOMs.

iii. Dibang Multipurpose Project:

- Installed Capacity:2880 MW (12x240 MW + 1x30 MW)
- Type of Project: Multi-Purpose Project.
- Expected Commissioning: February 2032
- Annual Design Energy: 11223 MU
- Useful Life: 40 Years
- Transmission Connectivity: ISTS Connectivity
- Levelised Tariff: Rs.4.46/kWh
- Actual Tariff: Tariff/Annual Fixed Cost (AFC) shall be determined by CERC under Section 62 of the Electricity Act, 2003.
- Power Allocation: Allocation is to be done by the Ministry of Power (MoP), Government of India (GOI), based on consent received from the 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, 22nd July 2022 and 20th October 2023, the hydro power generated from the aforesaid projects qualify 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 Teesta-VI Hydro Electric Project (THEPL), Ratle Hydro Electric Project Limited (RHPCL) and Dibang Multipurpose Project are December 2027, December 2027 and February 2032 respectively. In view of this, if GRIDCO executes the Power Purchase Agreements (PPAs) for procurement of power from these upcoming HEPs 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 projects, in accordance with the prevailing regulatory framework.
- 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 comparison, the indicative levelized Tariff of Teesta-VI HEP, Ratle HEP and Dibang of Rs.4.07/kWh,Rs.3.92/Kwh and Rs.4.46/kwh, 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 are generally less than that of Hydro Electric Projects (HEPs). However, supply from WPPs is erratic in nature, so having large capacity of wind power in the energy portfolio would make it very difficult to maintain 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 Load Generation Balance Report (LGBR) outlining projections for Peak Power Supply-Demand and Annual Average Power Supply-Demand up to FY 2047-48. Based on current and planned generation capacities, GRIDCO has indicated that the State is likely to face a power deficit during peak demand periods from FY 2025-26 to FY 2029-30, even after factoring in contingency reserves. Although a surplus power is anticipated beyond FY 2029-30, the upcoming projects are still in the planning stage, and integration of these projects into the overall generation portfolio remains a challenge. Additionally, having adequate Hydro Power in generation mix is crucial due to large scale integration of variable Renewable Energy Sources. It is emphasized that prudent power procurement planning must prioritize the ability to meet peak demand requirements.
- j) Furthermore, the Ministry of Power (MoP), Government of India, vide its Order dated 25.02.2025, has allocated 107 MW from the Dibang Hydro Electric Project against the requisitioned quantum of 200 MW, and 19 MW from the Teesta-VI Hydro Electric Project against the requisitioned quantum of 100 MW to the State of Odisha. Based on

- this allocation, GRIDCO has anticipated that it may similarly receive a lower allocation from the Kiru Hydro Electric Project and the Ratle Hydro Electric Project than the requisitioned quantum as the requisitions for availing power from these projects are much more than installed capacity.
- k) 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.
- 1) 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 following Power Purchase Agreements (PPAs) to be executed.
 - Between M/s. GRIDCO Limited (GRIDCO) and NHPC Limited for procuring power from Teesta-VI Hydro Electric Project (THEPL) (4X125MW=500 MW) located in Sikkim.
 - ii. Between M/s. GRIDCO Limited (GRIDCO) and Ratle Hydro Electric Power Corporation (a JV Company of NHPC Ltd & JKSPDCL) for procuring power from Ratle Hydro Electric Project Limited (RHPCL) (4 X 205MW + 1 X30MW=850 MW) located in the Union Territory of Jammu & Kashmir.
 - iii. Between M/s. GRIDCO Limited (GRIDCO) and NHPC Limited for procurement of power from the Dibang Multipurpose Project (12 X 240MW = 2880 MW) located in Arunachal Pradesh.

Submissions of the Respondents:

- 3. The Respondent, NHPC Ltd. has submitted the following:
 - a) Lanco Teesta Hydro Power Limited (LTHPL) is a wholly owned subsidiary of NHPC Limited and vide order dated 02.01.2025, the Ministry of Corporate Affairs (MCA) has approved the amalgamation proposal of NHPC Ltd & Teesta-VI HEP (4X125MW=500 MW) located in Sikkim. Therefore, LTHPL has become a unit of NHPC on full ownership basis instead of subsidiary unit. w.e.f. 02.01.2025.

b) Draft PPA for Teesta-VI HEP (4X125MW=500 MW) located in Sikkim has been revised and Lanco Teesta Hydro Power Limited (LTHPL) has been substituted with NHPC Limited.

4. 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 TPWODL has conveyed its consent for the execution of the proposed PPAs.
- b) Timely execution of the PPA will be beneficial for the state power sector, ensuring longterm renewable power availability at a competitive tariff while fulfilling regulatory obligations.
- c) The Commission may take suitable decision considering above submissions.
- 5. 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.
 - b) The Commission may take suitable decision considering above submission.
- 6. 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.
 - b) Solar Power Projects of 576 MW, Hydro Power Projects of 1657 MW and Wind Power Projects of 316 MW are lined up in the state upto FY 2029-30.

- c) As per provisional LGBR prepared by the Petitioner- GRIDCO, peak power shortage is estimated from FY 2025-26 to FY 2029-30 and there would be surplus power beyond FY 2029-30. The proposed projects will not be very useful for meeting the power shortage estimated during FY 2025-26 to FY 2029-30.
- d) 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 picture for taking a holistic decision. The Commission may also take into account upcoming Wind and Hydro projects within the State, as State may need to procure certain portion of these power from such sources. Such power may be economical due to savings in transmission costs and losses as compared to projects located in other part of the country.
- e) 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.
- f) 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.
- g) 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.
- h) The Commission may take a holistic & balanced view considering above submissions.
- 7. 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 TPSODL has conveyed its consent for the execution of the proposed PPAs.
- 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.
- c) The Commission may take suitable decision considering above submissions.
- 8. Odisha Power Transmission Corporation Ltd. (OPTCL) and the Department of Energy, Government of Odisha have no objection against the proposal.
- 9. 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:
 - The Respondent, M/s NHPC is developing various Hydro Electric Projects such as Teesta-VI Hydro Electric Project (4X125MW=500 MW) in the State of Sikkim, Ratle Hydro Electric Project (4 X 205MW + 1 X30MW=850 MW) in the Union Territory of Jammu & Kashmir through the Joint Venture (JV) of NHPC Ltd. and Jammu & Kashmir State Power Development Corporation Ltd. (JKSPDCL) i.e. "Ratle Hydroelectric Power Corporation Limited (RHPCL)" and Dibang Multipurpose Project (12 X 240MW = 2880 MW) in the State of Arunachal Pradesh.

- b) M/s NHPC along with Lanco Teesta Hydro Power Ltd. (LTHPL) was jointly developing Teesta-VI Hydro Electric Project. Subsequently LTHPL have amalgamated with NHPC to become a unit of NHPC w.e.f. 02.01.2025. Accordingly, the PPA has been modified.
- c) 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 aforesaid Hydro Electric Projects, GRIDCO, based on the recommendation of the Committee of Directors (CoD) in its 40th meeting held on 25.07.2023, has given its inprinciple consent to NHPC Ltd. for the procurement of 100 MW of power from the upcoming 500 MW Teesta-VI Hydro Electric Project (THEPL) and 100 MW of power from the upcoming 850 MW Ratle Hydro Electric Project Limited (RHPCL). Similarly, as per the recommendation of the Committee of Directors (CoD) in its 51st meeting held on 08.10.2024, GRIDCO has given its in-principle consent to NHPC Ltd. for the procurement of 200 MW of power from the upcoming 2880 MW Dibang Multipurpose Project.
- d) MoP, Govt. f India, vide its Order dated 25.02.2025 has allocated 107 MW from the Dibang Hydro Electric Project (against requisitioned quantum of 200MW) and 19 MW from Teesta-VI Hydro Electric Project (against requisitioned quantum of 100 MW). Similarly lower quantum of allocation is expected from Ratle Hydro Electric Project as requisitions for availing power from these projects are more than the installed capacity.
- e) The hydro power generated from the said projects qualifies for meeting the Hydro Purchase Obligation (HPO) targets as per notifications (dated 08.03.2019, 29.01.2021 & 22.07.2022) of the Ministry of Power, Govt. of India.
- f) The expected Commercial Operation Date (COD) of the Teesta-VI Hydro Electric Project (THEPL), Ratle Hydro Electric Project Limited (RHPCL) and Dibang Multipurpose Project are December 2027, December 2027 and February 2032, respectively. However, if GRIDCO executes the Power Purchase Agreements (PPAs) with NHPC for procurement of power from the aforesaid Hydro Electric projects 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 COD of the said project, in accordance with the prevailing regulatory framework.

- g) The indicative levelized tariff of the Teesta-VI Hydro Electric Project (THEPL), Ratle Hydro Electric Project Limited (RHPCL) and Dibang Multipurpose Project would be Rs.4.07/kWh., Rs.3.92/kWh and Rs.4.46/kWh, respectively.
- h) All four distribution licensees (TPWODL, TPCODL, TPNODL and TPSODL) have expressed their concurrence to GRIDCO's procurement of power from the aforesaid Hydro Electric Projects (HEP), noting that such procurement would contribute towards meeting the State's Renewable Purchase Obligation (RPO) targets. The licensees have also emphasized the need for the timely execution of the Power Purchase Agreements (PPAs), 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 and OPTCL have no objection to the proposal.
- 10. The terms and conditions of Power Purchase Agreements (PPAs) for the procurement of power from the aforementioned Hydro Electric Projects, as submitted by GRIDCO and NHPC for the Commission's approval, have been mutually agreed upon by both parties, namely M/s GRIDCO Ltd. and M/s NHPC Ltd.
- 11. The salient features of PPAs are as follows:
 - a) Teesta-VI Hydro Electric Project (500 MW): This Power Purchase Agreement shall be between M/s GRIDCO Limited and M/s NHPC Limited. for procuring power from Teesta-VI Hydro Electric Project (THEPL) (4X125MW=500 MW) located in Sikkim.
 - b) Ratle Hydro Electric Project Limited (RHPCL): This Power Purchase Agreement shall be between M/s. GRIDCO Limited and Ratle Hydro Electric Power Corporation (a JV Company of NHPC Ltd & JKSPDCL) for procuring power from (4 X 205MW + 1 X30MW=850 MW) located in the Union Territory of Jammu & Kashmir.
 - c) Dibang Multipurpose Project: This Power Purchase Agreement shall be between M/s. GRIDCO Limited (GRIDCO) and M/s NHPC Limited for the procurement of power from the Dibang Multipurpose Project (12 X 240MW = 2880 MW) located in Arunachal Pradesh.

- d) The allocation of power from the aforesaid Hydro Electric Projects amongst the Bulk Power Customers shall be in accordance with the instructions regarding allocation of power issued by the Ministry of Power (MOP), Government of India, from time to time.
- e) 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.
- f) 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.
- g) The tariff to be charged & its associated Terms and Conditions for the energy to be supplied from the aforesaid Hydro Electric Projects 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.
- h) Payment of bill(s) for supply of power from the aforesaid Hydro Electric Projects 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 NHPC/RHPCL 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.
- i) However, after the issue of the revised tariff order of the aforesaid Hydro Electric Projects, 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. NHPC 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.
- j) 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.
- 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 parties, 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.
- 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 the aforesaid Hydro Electric Projects (HEP) Station(s) whichever is earlier. However, during the currency of the agreement, if any Tariff notifications/orders/regulations/ directions are issued by CERC/ Govt. of India/State Govt or any competent authority, the same shall be acceptable and binding on both parties.
- 12. 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 Renewable Energy (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 crucial due to large scale integration of power from RE sources and is the need of the hour to support smooth operation of the grid on real-time basis and meet peak power demand. Moreover, cost of power

from Hydro Electric Power project is likely to be more in future. In view of the above observations and considering the benefit of 100% waiver of ISTS charges & fungibility of Hydro Project, the Commission approves the following proposed Power Purchase Agreements (PPAs) to be executed between GRIDCO & Hydro Project developers for procurement of power as per allocation made by the Ministry of Power (MoP), Government of India (GoI) in favour of the State of Odisha to meet the peak power demand as well as the RPO target of the State:

- a) The Power Purchase Agreement (PPA) to be executed between M/s GRIDCO Limited and M/s NHPC Limited for procuring power from Teesta-VI Hydro Electric Project (THEPL) (4X125MW=500 MW) located in Sikkim (at indicative levelized tariff of Rs.4.07/kwh).
- b) The Power Purchase Agreement (PPA) to be executed between M/s. GRIDCO Limited and Ratle Hydro Electric Power Corporation (a JV Company of NHPC Ltd & JKSPDCL) for procuring power from (4X205MW + 1X30MW =850 MW) located in the Union Territory of Jammu & Kashmir (at indicative levelized tariff of Rs.3.92/kwh).
- c) The Power Purchase Agreement (PPA) to be executed between M/s. GRIDCO Limited (GRIDCO) and M/s NHPC Limited for the procurement of power from the Dibang Multipurpose Project (12 X 240MW = 2880 MW) located in Arunachal Pradesh (at indicative levelized tariff of Rs.4.46/kwh).
- 13. GRIDCO is advised to consult DISCOM(s) in future, prior to signing of PPA with generators for procurement of power as per terms of the Vesting Order.
- 14. 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