

**ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
PLOT NO.-4, CHUNUKOLI, SHAILASHREE VIHAR
BHUBANESWAR - 751 021**

Present: **Shri U. N. Behera, Chairperson**
 Shri S. K. Parhi, Member
 Shri G. Mohapatra, Member

Case No. 43/2021

GRIDCO Limited

..... **Petitioner**

Vrs.

NTPC & Others

..... **Respondents**

In the matter of: **Application under S.86 (1) (b), Sec. 61 (d) of the Electricity Act, 2003 read with Sec. 21(4) (b) (5) of the Odisha Electricity Reform Act, 1995, MoP/GoI Notification No. 23/23/2020-R&R [254623] dated 22.03.2021 and other enabling provisions for seeking approval of the Commission for relinquishment of share of power as specified in PPA executed between GRIDCO and NTPC for purchase of power from Farakka-I & II and Kahalgaon-I of NTPC stations beyond its useful life of 25 years.**

For Petitioner: **Shri Arjit Maitra, Advocate and Ms. Sasmita Pattajoshi, AGM on behalf of GRIDCO,**

Respondents: **Ms. Swapna Seshadri, Advocate on behalf of M/s. NTPC Ltd., Shri V. Wagle, CEO, TPCODL, Shri K. C. Nanda, DGM (Fin.), TPWODL, Ms. Malancha Ghose (RA), TPNODL, Shri Binod Nayak, Asst. GM (Comm.), TPSODL and Shri B. K. Das, GM (RT&C), OPTCL. Nobody is present on behalf of DoE, GoO.**

ORDER

Date of hearing: 17.08.2021

Date of order: 29.10.2021

The petitioner GRIDCO Ltd. has filed the present application seeking approval of the Commission for relinquishment of state share of power from Farraka STPS-I & II and Kahalgaon STPS-I of NTPC beyond their useful life of 25 years.

2. GRIDCO has submitted that they have entered into bulk power supply agreement with NTPC on 01.01.1993 to purchase power from FSTPS-I & II, KhSTPS-I and TSTPS-I. The share allocation to Odisha from FSTPS I & II is 14.18% (227 MW) including solar equivalent thermal power of approximately 9 MW and from KhSTPS-I it is 15.77% (133 MW) including solar equivalent thermal power of 5 MW. Since FSTPS-I & II and KhSTPS-I are completing their useful life of 25 years on 01.07.2021 and

01.08.2021 respectively, GRIDCO had asked NTPC in 2018 and 2020 to intimate the futuristic planning of power generation and supply of power from these power stations beyond their useful life as per the provision of clause 17(2) of CERC Tariff Regulations, 2019. The response of NTPC vide its letter dated 17.06.2020 was that they had not considered such matter for any of the NTPC stations. However, now Ministry of Power, GoI vide its Notification No.23/23/2020-R&R[254623] dated 22.03.2021 have issued guidelines enabling the State/DISCOMs to relinquish their share from eligible Central Generating Stations after expiry of the term of the PPA i.e. on completion of 25 years from the date of commissioning of the plant or a period specified in the PPA. However, the request for relinquishment of such power from Central Generating Stations is to be submitted only after the approval of the State Commission who would ensure the adequacy of power tied up with the DISCOMs to meet the demand of electricity for all the consumers under such DISCOMs. Further MoI, GOI have issued a clarification letter dtd 05.07.2021 clarifying that the entire allocated power from the project which has completed 25 years can be relinquished. The allocated power cannot be surrendered partly from a project. Accordingly, GRIDCO has filed the present petition before this Commission to allow it to relinquish the entire state share of power from FSTPS-I & II (218 MW) and KhSTPS-I (128 MW) except the allocated share of the bundled thermal power of approximately 14 MW being availed by GRIDCO from these two power stations.

3. GRIDCO has submitted that they have sought such relinquishment due to a matter of exigency and necessity as the rate of procurement power from the said power stations is very high in one hand while on the other hand the state of Odisha is in power surplus and such surplus is expected to continue upto the year 2029-30 as per their availability-demand projection. GRIDCO has stated that the surplus situation will be due to (i) home state share of CGSs has been increased from 10% to 50%, (ii) capacity addition of IPPs, (iii) power allocation of 30% from UMPP, (iv) upcoming state sector power plants, (v) subdued demand growth in the state and peak demand is much less as compared to the EPS forecasts. The contracted capacity of GRIDCO with the existing generators is 6978.65 MW and with the upcoming generators contracted capacity is 2544 MW.
4. GRIDCO has stated that the said power plants do not get scheduled under merit order despatch principles. But still it has to pay the fixed charges to NTPC. At times, power

is force scheduled from these power plants though GRIDCO has surplus availability of power. Sometimes GRIDCO was scheduling power from these plants to maintain technical minimum/grid stability etc. However, the fixed cost of these plants has not been allowed by the Commission in the ARR and bulk supply price for the last few years, which is being paid continuously by GRIDCO accumulating to a substantial figure of Rs.183 crore as on date. The Commission had asked the petitioner to take up the issue of the liability of fixed cost with the state government. But the state government has not extended any grant to GRIDCO to equalise the impact of these fixed cost being paid to NTPC. Hence the supply from the said power plants and consequential financial burden on GRIDCO should be stopped. GRIDCO has further stated that for FY 2020-21 the actual weighted variable charge of FSTPS-I & II is 267.43 p/u and for KhSTPS-I it is 221.53 p/u; whereas the actual variable charge for the thermal plants inside the state is in the range of 107.55 p/u to 173.40 p/u. Further, GRIDCO has stated that any procurement of power from these plants after competition of 25 years will lead to increase capital cost due to FGD installation as evident from the tariff petition filed by NTPC before CERC wherein the power procurement cost to GRIDCO would be approximately 419 p/u for FSTPS-I & II and 418 p/u for KhSPTS-I.

5. GRIDCO has stated that they had served notice to NTPC on 21.06.2021 for relinquishment of 218 MW power from FSTPS-I & II and 128 MW from KhSTPS-I with effect from 01.07.2021 and 01.08.2021 respectively pending necessary approval from OERC. But as per NTPC, GRIDCO cannot serve a notice to NTPC without necessary approval of OERC. GRIDCO has further stated that Punjab State Electricity Regulatory Commission vide its order dated 01.08.2021 has already allowed Punjab State Power Corporation Ltd. to relinquish its allocated share of power from Anta, Auriya, Dadri Power Stations of NTPC in terms of the aforesaid guidelines dated 22.03.2021 of MoP, GoI. In view of the above, GRIDCO has prayed the Commission to allow it to relinquish the allocated state share of power from FSTPS-I & II and KhSTPS-I of NTPC immediately in order to avoid further fixed cost as well as variable cost burden on GRIDCO.
6. The respondent NTPC has submitted that the plain reading of the MoP notification dated 22.03.2021 does not give option to GRIDCO to surrender the past capacity from any generating station. It cannot be that GRIDCO retain part power from Kahalgaon

and Farraka power stations and surrender the balance power. Further GRIDCO is not in a power surplus situation in terms of the figures given by CEA which are more authentic than the data placed by GRIDCO. As per the 19th EPS Report of CEA, there is no surplus power in the state of Odisha till 2037. GRIDCO's projection of the peak power supply demand position till FY 2029-30 and the same for the State of Odisha as per 19th EPS report of CEA is given hereunder:

In MW	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Projections of peak demand as per instant petition by GRIDCO	4507	4722	4963	5323	5490	5649	5767	5993	6119
Total peak availability as per instant petition (excluding FSTPS-I&II, KhSTPS-I & TSTPS-I)	4498	4828	5422	5710	5906	5955	5742	5809	5871

In MW	2022	2023	2024	2025	2026	2027	2028	2029	2030
Odisha projections of Peak demand as per 19 th EPS (PAM baseline scenario)	8406	8944	9511	10103	10716	11353	12015	12703	13417

7. NTPC has stated that from the above table it is observed that the state is not in a power surplus situation and the submission of GRIDCO is misconceived. Further, GRIDCO has not given the basis for its demand projection upto 2029-30. NTPC has further submitted that GRIDCO is continuously drawing power from FSTPS-I & II and KhSTPS-I during the last several years due to unreliable power supply from the IPPs in the state of Odisha. Further, GRIDCO on one hand has approached for approval for relinquishment of power from NTPC's instant stations and on the other hand is seeking 100% power allocation from Talcher-III, the power cost of which will be much higher than the cost from the aforesaid stations. However, the main condition which needs to be examined by this Commission as per para-II of the Notification dated 22.03.2021 is the "State Commission would ensure the adequacy of power tied up with the DISCOMs to meet the demand of electricity for all consumers under such DISCOMs".
8. NTPC has submitted that the averment of GRIDCO that the cost of power purchase from FSTPS-I & II and KhSTPS-I would go upto 419 p/u and 418 p/u respectively, is not correct. As per the norms of CERC Tariff Regulations, 2019 the normative tariff of FSTPS-I & II and KhSTPS-I for the FY 2021-22 was approximately 352 p/u and 331 p/u respectively. However, on the issue of installation of FGD and emission

control system there is a change in law applicable to all thermal power plants including IPPs from which GRIDCO is purchasing power. Any impact in tariff on this account is applicable to all and hence cannot be considered in the merit order stack. Further, NTPC has stated that the power from its stations is reliable and quality power as compared to the unreliable and erratic supply of power from IPPs and costly short term procurement from the market.

9. NTPC has further submitted that GRIDCO has relied on the order dated 05.08.2021 passed by the Punjab SERC whereby the surrender of power from Anta, Auraiya and Dadri Gas stations of NTPC has been permitted. This order does not help GRIDCO in any manner since it is based on separate set of facts. In view of the above, NTPC has stated that there is no merit in the present petition filed by GRIDCO and thus deserves to be dismissed.
10. Replying to the objections of NTPC, the petitioner GRIDCO in its rejoinder has submitted that usually planning studies are carried out for all India demand as per Electric Power Survey (EPS). Several times the CEA is known to do a course correction based upon the actual ground realities. The perspective plan formulated by CEA and EPS is relevant for the CTU to carryout planning process for identification of Inter-State Transmission System. The EPS report contains the probabilistic load forecast. The energy requirement as well as peak requirement as mentioned in 19th EPS report of CEA is on higher side. The CAGR is about 6.64% shown in the CEA report which is on very higher side. The actual energy requirement for the State vis-a-vis that of energy requirement as forecasted in 19th EPS from FY 2015-16 to 2021-22 are as follows:

Year	Actual Energy Required by GRIDCO in MU*	Energy Requirement forecasted in 19th EPS in MU
2017-18	25431	29307
2018-19	26320	30568
2019-20	25527	32084
2020-21	25468	33744
2021-22	28732**	35538

** The energy provided is the actual energy billed by GRIDCO to DISCOMs, IMFA, NALCO & Other CGPs and is inclusive of STU loss of around 3%*

*** The considered energy is the approved BSP quantum by OERC (27870 MU) in its BSP order dated 26.03.2021 for FY 2021-22 including 3% STU loss.*

11. GRIDCO has submitted that the above data clearly indicate the higher energy is being forecasted in 19th EPS report. GRIDCO has made a realistic power scenario considering the present realistic facts with authenticated documents obtained from different sources. The annual average demand projection till FY 2029-30 submitted by GRIDCO in main petition has been estimated based on the following assumptions:
- i. Base year- FY 2019-20; Based demand- 2949 MW (after FANI adjustment)
 - ii. Growth (CAGR) of non-industrial demand for FY 2020-21 onwards is considered @2%.
 - iii. Grid power requirement of upcoming new industries (with and without CGPs) as per IPICOL data has been considered.
 - iv. The CAGR of the demand growth from FY 2019-20 to 2029-30, with the aforementioned assumptions, is coming around 3.45%.
- Similarly, peak demand projection till FY 2029-30 has been estimated based on the following assumptions:
- a. Base year- FY 2019-20; Based demand; 4244 MW
 - b. Growth (CAGR) of non-industrial demand for FY 2020-21 onwards is considered @ 3%.
 - c. Grid power requirement of upcoming new industries (with and without CGPs) as per IPICOL data has been considered.
 - d. The CAGR of the peak demand growth from FY 2019-20 to 2029-30, with the aforementioned assumptions, is coming around 3.73%.
12. With the aforementioned demand forecast and actual availability of the generators both existing as well as upcoming generators without availing power from FSTPS-I & II and KhSTPS-I shows the surplus situation of the State as submitted in the main petition. However, there may be some peak deficit beyond FY 2026-27 for which GRIDCO would take appropriate measure at the time of requirement. Further, towards meeting the RPO upto FY 2021-22, GRIDCO has tied up 999 MW of solar capacity and 479.15 MW of non-solar capacity totalling to 1478.15 MW. As per the draft OERC RPO Regulations, 2021, RPO target of 18% is proposed for FY 2024-25. The RPO trajectory of MNRE is 41% by FY 2029-30 with reference to the national goal of 450 GW. However, GRIDCO has chalked out a conservative RPO trajectory of 17%

by FY 2022-23 and 25% by FY 2029-30 and to meet this 25% RPO target, GRIDCO has to add around 2477 MW additional RE capacity in phased manner, which would meet the estimated peak deficit beyond FY 2026-27. Further, the Commission in its ARR and BSP order of GRIDCO for the FY 2021-22 and 2020-21 has not approved any drawl of power from FSTPS-I & II and KhSTPS-I along with some other NTPC stations which clearly shows that the State is in power surplus condition. GRIDCO has stated that though power was consistently drawn from these power stations earlier, but in meantime with capacity addition in the State such as Vedanta Limited, GMR, OPGC (Units-III & IV) and Darlipali STPS, the State is not requiring power from these power stations. Further, as evident from the recent BSP orders of the Commission, these power stations are not coming under merit order principle and the drawal have been consistently rejected by the Commission. Regarding execution of Talcher-III, GRIDCO has submitted that the PPA was signed between GRIDCO and NTPC on 27.12.2010, the project has been cleared by HLCA in its 22nd Meeting on 29.02.2020 with a condition that at least 50% of power from this project should be allocated in favour of the State of Odisha being the host State. However, as stated by NTPC that GRIDCO is seeking 100% power allocation from Talcher-III is not correct.

13. In its rejoinder, GRIDCO has further submitted that Ministry of Power, Govt. of India vide its letter dated 01.09.2021, has considered the proposal of GRIDCO for relinquishment of 346 MW power from the subject power stations FSTPS-I & II (218 MW) and KhSTPS-I (128 MW) and re-allocated the same to the State of Gujarat for a period of 5 years.
14. Heard the parties. It is observed that in the BSP order of GRIDCO for last few years, the Commission has not approved any drawal from the subject power stations FSTPS-I & II and KhSTPS-I for State consumption due to the fact that purchase of power from these power stations does not come under merit order since low cost power is available to GRIDCO from other generators/sources with whom GRIDCO has tied up for procurement of power. Further, purchase of power from central generating stations involves higher transmission charges and losses. The Commission further observed that the Notification dated 22.03.2021 of Ministry of Power, Govt. of India enables the DISCOMs to either continue or exit from the PPA after completion of the term of the PPA beyond 25 years or a period specified in the PPA and allows flexibility to the

generators to sell power in any mode after State/DISCOM exit from the PPA. However, such relinquishment of power from CGSs requires approval of the State Commission which would ensure the adequacy of power tied up with the DISCOMs to meet the demand of electricity for all consumers under such DISCOMs.

15. The Commission further observed that as per the availability-demand estimation of GRIDCO till FY 2029-30, GRIDCO has surplus availability of power after meeting the projected State demand. Further, GRIDCO has stated that now it has tied up with 999 MW of solar capacity and 479 MW of non-solar capacity, totalling to 1478.15 MW towards meeting the RPO upto FY 2021-22 and it has to add around 2477 MW additional RE capacity for meeting the RPO trajectory of 25% by FY 2029-30, keeping in view the available power both in peak and off-peak hours. The Commission has further observed that as per the Department of Energy, Government of Odisha Resolution No. 7947 dated 17.08.2006, GRIDCO is the 'State Designated Entity' for execution of PPA with the generators for procurement of power. In view of the above, the Commission accepts the prayer of GRIDCO and allows it to relinquish the State share of power from FSTPS-I & II and KhSTPS-I of NTPC.
16. The Commission further observed that pending necessary approval from OERC, GRIDCO had served notice for relinquishment of 218 MW power from FSTPS-I & II excluding allocated share of 9 MW solar equivalent bundled thermal powers and 128 MW power from KhSTPS-I excluding allocated share of 5 MW solar equivalent bundled thermal power, totalling to 346 MW. Accordingly, Ministry of Power, Govt. of India vide its letter dated 01.09.2021, has decided to reallocate this 346 MW power from the subject power stations of NTPC to Gujarat for a period of 5 years. However, since NTPC has raised objection that GRIDCO cannot surrender part capacity of these power stations, now GRIDCO in its rejoinder has submitted that it is willing to exit / relinquish the bundled power of these stations, if the Commission deems it fit. The Commission observed that as per the notification dated 22.03.2021 of Ministry of Power, Govt. of India, "The States/DISCOMs having Long-term PPAs with the Central Generating stations, which are due to expire in the near future can opt to relinquish the entire allocated power from (firm and unallocated share) from such eligible CGSs post completion of the PPA tenure x x x x x x x x x x". The NTPC has raised this issue stating that GRIDCO cannot retain part power from Kahalgaon and Farraka power stations and surrender the balance power. The Commission

observed that GRIDCO has tied up with SECI and others for procurement of adequate quantum of solar power for meeting its solar RPO. Keeping in view the tied up solar capacity and solar capacity to be tied up in future, GRIDCO should estimate its solar RPO for future years and if required GRIDCO may also relinquish the said 14 MW solar equivalent bundled thermal power from FSTPS-I & II (9 MW) and KhSTPS-I (5 MW) of NTPC.

17. With the above observations and directions, the case is disposed of.

Sd/-
(G. Mohapatra)
Member

Sd/-
(S. K. Parhi)
Member

Sd/-
(U. N. Behera)
Chairperson