CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.622/GT/2020

Coram:

Shri P. K. Pujari, Chairperson Shri I. S. Jha, Member Shri Arun Goyal, Member Shri Pravas Kumar Singh, Member

Date of Order: 8th January, 2022

In the matter of:

Petition under Sections 62 and 79(1)(a) of the Electricity Act, 2003 read with Chapter-V of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 along with CERC (Terms and conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020, for determination of project specific levelized tariff for 25 MW Floating Solar Photo Voltaic Plant at NTPC Simhadri in Andhra Pradesh under the "Flexibility in Generation and Scheduling of Thermal Power Stations to reduce emissions" notified by the Ministry of Power on 5.4.2019

And in the matter of:

NTPC Limited, NTPC Bhawan, Core 7, Scope Complex, 7, Institutional Area, Lodi Road, New Delhi-110 003

....Petitioner

Vs

- Power System Operation Corporation Limited,
 B-9 (1st Floor), Qutab Institutional Area, Katwaria Sarai,
 New Delhi-110016
- 2. Power Grid Corporation of India Limited, "SAUDAMINI", Plot No. 2, Sector 29, Gurgaon-122 001
- Telangana State Southern Power Distribution Company Limited, Mint Compound, Corporate Office, Hyderabad-500 063
- 4. Telangana Northern Power Distribution Company Limited, House no. 2-5-31/2, Vidyut Bhawan, Nakkalagutta, Hanamkonda, Warangal -506 001



- 5. A.P. Eastern Power Distribution Company Limited, P&T Colony, Seethammadhara, Vishakhapatnam, AP-503013
- 6. A.P. Southern Power Distribution Company Limited, Besides Srinivasa Kalyana mandapam, Tiruchannur Road, Kesavayana Gunta, Tirupati, AP-517501
- 7. Bangalore Electricity Supply Company Limited, Krishan Rajendra Circle, Bangalore, Karnataka-506001
- 8. Mangalore Electricity Supply Company Limited, MESCON Bhavana, Corporate Office, Bejai Kevai Cross Road, Mangalore, Karnataka-575004
- 9. Chamundeshwari Electricity Supply Company Limited, Corporate Office, No. 29, Ground floor, Kaveri Grameena Bank Road, Vijayanagar 2nd stage, Mysore, Karnataka-570017
- Gulbarga Electricity Supply Company Limited,
 Main Road,
 Gulbarga, Karnataka-585102
- 11. Hubli Electricity Supply Company Limited, Navanagar, PB Road, Hubli, Karnataka-580025
- 12. Kerala State Electricity Board Limited, Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram, Kerala-695 004
- 13. Tamil Nadu Generation & Distribution Corporation Limited, NPKRR Maaligai, 144, Anna Salai Chennai, Tamil Nadu-600002
- 14. Electricity Department,Govt. of Puducherry137, NSC Bose SalaiPudduchery-605 001

....Respondents

Parties present:

Ms. Swapna Seshadri, Advocate, NTPC Shri Anand K. Ganesan, Advocate, NTPC



Ms. Ritu Apurva, Advocate, NTPC

Shri Jai Dhanani, Advocate, NTPC

Shri S. Vallinayagam, Advocate, TANGEDCO

Ms. B. Rajeswari, Advocate, TANGEDCO

Ms. R. Ramalakshmi, TANGEDCO

Ms. R. Alamelu, TANGEDCO

ORDER

The Petitioner, NTPC Ltd (in short 'NTPC') has filed this petition with the following prayers:

- i) Approve/Determine levelized tariff of the Project;
- ii) Allow and approve the use of solar power generated from Simhadri Super Thermal Power Station, Vishakhapatnam, Andhra Pradesh, under "Flexibility in Generation and Scheduling of Thermal Power Stations to reduce emissions" scheme of MoP, Gol notified vide No.23/70/2017-R&R dated 5th April 2018 for replacement of thermal power schedule of beneficiaries of NTPC coal Stations;
- iii) Permit NTPC to come with an appropriate petition(s) seeking approval of the mechanism of scheduling, energy accounting & DSM, RPO, waiver of ISTS transmission charges & losses, billing, and sharing of net gains etc. if required;
- iv) Pass such order(s)/ direction(s) on its own, which deems fit in such case.

Background

2. NTPC is setting up a 25 MW Floating Solar Photo Voltaic Plant at NTPC Simhadri Super Thermal Power Station in State of Andhra Pradesh (hereinafter referred to as the 'Simhadri Floating Solar project') under the Flexibility in Generation and Scheduling of Thermal Power Stations to reduce emissions scheme of Ministry of Power, Gol dated 5th April, 2018 (in short 'the Flexibility Scheme') and is seeking, through the present petition, determination/approval of levelized tariff in terms of Sections 62 and 79(1)(a) of the Electricity Act, 2003 (in short, 'the Act') read with the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020 (in short, 'the 2020 RE Tariff Regulations').

Submissions of NTPC

- 3. NTPC, in the present petition, has submitted that it intends to use the solar power to replace the thermal power supplied from Simhadri STPS to its beneficiaries. It has also submitted that in case generation from Simhadri Floating Solar project is not fully utilized for replacement of the thermal power at Simhadri STPS, due to any constraint, such as Technical Minimum Schedule, Reserve Shut Down, Long Outage etc., then the remaining power generated from Simhadri Floating Solar project may be sold in the market or be sold to any other entity. NTPC has further submitted that in terms of the Flexibility Scheme, the Solar power shall be supplied at a tariff equal to the Energy Charge Rate (ECR) of Simhadri STPS, whose power shall be replaced by the solar power from Simhadri Floating Solar project. NTPC has stated that the net gain from the supply of Solar power in place of thermal power, under the Flexibility Scheme, shall be shared with the beneficiaries in the ratio of 50 (Beneficiary): 50 (NTPC).
- 4. NTPC has further submitted that power from the Simhadri Floating Solar project would be pooled at 11 kV and connected to 11 kV Simhadri STPS supply system and the power from Simhadri Floating Solar project shall be evacuated through the electrical system of existing Simhadri STPS, as per connectivity granted to Simhadri Floating Solar project vide CTU letter dated 02.01.2020. It has also submitted that since the power from RE generator under the provisions of the flexibility scheme is replacing the schedule of Simhadri STPS of NTPC, no separate transmission access for dispatch of solar power to the beneficiaries of Simhadri STPS is being envisaged. NTPC has also stated that the power to be replaced is the power contracted to be supplied under the existing PPA, and LTA is already

available for the same. NTPC has submitted that the schedule of Simhadri TPS shall be met by the combination of generation from the Simhadri Floating Solar project and Simhadri STPS of NTPC in any ratio and for the purpose of energy accounting for RPO fulfilment, gain sharing calculation, appropriate energy meter shall also be installed. It has also submitted that the billing of energy charges of thermal station may be done as per the present methodology based on schedule given by the beneficiaries and Regional Energy Account (REA) may provide schedule of RE generating station, in addition to the schedule of thermal generating station given by beneficiaries. NTPC has stated that the EPC contract for setting up the Simhadri Floating Solar project has been awarded to M/s BHEL on 2.7.2019 through International Competitive Bidding (ICB) and subsequent reverse auction. The scheduled commercial operation date of the project is 1.1.2021 i.e. 18 months from the date of issuance of Notification of Award. In this background, NTPC has approached this Commission under Regulation 8(2) of the 2020 RE Tariff Regulations seeking determination of tariff for its Simhadri Floating Solar project along with other prayers in paragraph 1 above.

5. Reply to the Petition has been filed by the Respondents POSOCO and TANGEDCO and the Petitioner has filed its rejoinder to the said replies.

Hearing dated 16.7.2021

6. During the hearing of the petition along with Petition No.368/GT/2020 on 16.7.2021, the learned counsel for the Petitioner made brief submissions in the matter. However, on an observation of the Commission that the Simhadri Floating Solar project does not appear to have any arrangement for supply of electricity to a distribution licensee as required under Section 62(1)(a) of the Act, the learned

counsel for the Petitioner sought time to explore the possibility of entering into an arrangement with the Respondent beneficiaries, with regard to the replacement of the existing thermal power through renewable energy source, based on the Flexibility Scheme.

Hearing dated 21.12.2021

- 7. The petition was heard through video conferencing on 21.12.2021.
- 8. During the hearing, the learned counsel for the Petitioner submitted that pursuant to the hearing dated 16.7.2021, NTPC had drafted an agreement to operationalize the Flexibility Scheme and circulated the same to all Respondent beneficiaries, who had raised several issues. She further submitted that MOP, GOI vide its letter dated 15.11.2021 has amended the Flexibility Scheme issued on 5.4.2018, wherein, under paragraph 8 of the Flexibility Scheme (as amended), special dispensation has been granted in cases where the landed price of RE power is less than ECR of the generating station whose power is being replaced, and in such cases, there was no need to enter into a separate agreement and replacement of power is to be considered within the existing PPA.
- 9. The learned counsel for the Petitioner further submitted that the Solar power cost of Simhadri Floating Solar project is higher than the weighted average ECR of Simhadri STPS. Therefore, the learned counsel submitted, NTPC has proposed to replace the thermal power from its Kudgi Super Thermal Power Station (2400 MW) located in the State of Karnataka instead of that from Simhadri STPS, with the Solar power generated from Simhadri Floating Solar project, for a quantum of 25 MW, subject to evacuation of power through the existing ISTS network of Simhadri STPS. She further submitted that the same was made known to the Respondent

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beneficiaries and SRPC by letter dated 16.12.2021. The learned counsel added that since the beneficiaries of Simhadri STPS and Kudgi STPS are the same, they may be granted time to respond to the said proposal of the Petitioner, NTPC.

10. The learned counsel for the Respondent, TANGEDCO pointed out that the prayers (ii) and (iii) in paragraph 1 above, as sought by the Petitioner, NTPC is not maintainable as the present petition, is only for determination of levelized tariff of the Simhadri Floating Solar project in terms of the 2020 RE Tariff Regulations. As regards the supply of power by the Petitioner, NTPC to the Respondent beneficiaries, in terms of the Flexibility Scheme (as amended), the learned counsel for the Respondent, TANGEDCO raised various objections, such as (a) absence of any provision under the existing PPA for replacement of thermal power with Solar power; (b) proposal of NTPC amounts to an unilateral amendment of the existing PPA, which is not permissible; (c) the Respondent beneficiaries not being consulted by the Petitioner, NTPC before setting up the Solar project; (d) no State has asked for sharing of RPO of the States by the generator; (e) supply of the bundled power by Petitioner NTPC under the Flexibility Scheme is without the approval of the Commission; (h) the proposed sharing of gains under the Flexibility Scheme is not acceptable as no consent of beneficiaries have been obtained; and (i) no separate open access has been taken by NTPC for proper accounting and record keeping of the power generated from RE sources and thermal sources. The learned counsel for the Respondent, while pointing out that NTPC is at liberty to enter into a separate arrangement/ PPA with any party for supply of RE power, submitted that the Respondent beneficiaries cannot be forced to take the bundled power under the Flexibility Scheme. He also submitted that the present proposal to replace the

thermal power of Kudgi STPS with Solar power from Simhadri Floating Solar project under the Flexibility scheme, has been made only to compensate the deficiencies in the generation capacity of the Kudgi STPS.

- 11. In response, the learned counsel for the Petitioner, NTPC pointed out that the above submissions of the learned counsel for Respondent TANGEDCO are different from the submissions of the respondent in its reply affidavit. She further submitted that in response to NTPC emails dated 6.9.20021 and 24.9.2021 requesting for a supplementary PPA for supply of power in terms of the Flexibility Scheme (as amended), the Respondent TANGEDCO vide its letter dated 4.10.2021, has informed the Petitioner that a supplementary PPA was not required, apart from seeking other clarifications. The learned counsel, however, confirmed that the prayer of the Petitioner, in the present petition, is limited to the approval of levelized tariff of Simhadri Floating Solar project.
- 12. The learned counsel for the Petitioner, NTPC reiterated that since ECR of Simhadri STPS was lower than the Solar power cost of the Simhadri Floating Solar project, the Petitioner NTPC, has proposed the replacement of the thermal power of Kudgi STPS (with higher ECR) with the Solar power, in terms of the Flexibility Scheme. The learned counsel further submitted that since the aforesaid proposal of NTPC has been placed on record vide affidavit dated 16.12.2021, the Respondents may be permitted to submit their comments on the said proposal, before further hearing and consideration of the same by the Commission.
- 13. On a query by the Commission on the status of the Simhadri Floating Solar project, the learned counsel for the Petitioner, NTPC submitted that while part

capacity of 10 MW of the said project achieved COD on 30.6.2021, the balance capacity of 15 MW achieved COD on 21.8.2021. On a further query by the Commission as regards the power supplied after COD of the project, the learned counsel clarified that for the period from 16.7.2021 to 15.11.2021, the thermal power of Simhadri STPS was replaced with the Solar power from the said project, with self-accounting being carried out by NTPC. She further clarified that NTPC has, however, undertaken to bear all losses, on account of such replacement of thermal power with Solar power, subject to the final decision of the Commission. The learned counsel added that from 15.11.2021 i.e. after the amended Flexibility Scheme was issued by MOP, GOI, the Petitioner, NTPC has proposed to the beneficiaries, the replacement of the thermal power of Kudgi STPS (instead of Simhadri STPS) with the Solar power from the Simhadri Floating Solar project.

- 14. The Commission noted that the Simhadri Floating Solar project neither has any arrangement for supply of electricity to a distribution licensee as required under Section 62(1)(a) of the Act nor has the Commission yet determined the tariff in terms of Sections 62 and 79(1)(a) of the Act read with the 2020 RE Tariff Regulations. The Commission also directs the Power System Operation Corporation Limited, Respondent No.1 to take note of these facts.
- 15. However, considering the submissions of the parties and keeping in view that the fact that the Petitioner NTPC has proposed the replacement of thermal power of Kudgi STPS instead of that from Simhadri STPS with the Solar power from Simhadri Floating Solar project, the Commission observed that the present petition may be disposed of, with a liberty to the Petitioner NTPC to file a fresh petition, with appropriate reliefs. It was accepted by the learned counsel for the Petitioner, NTPC.

Accordingly, the present petition is hereby disposed of, with a liberty to the Petitioner for filing a fresh petition. The filing fees deposited by the Petitioner for this petition is directed to be adjusted against the fresh petition, to be filed in terms of the liberty granted.

16. Petition No. 622/GT/2020 is disposed of in terms of the above.

Sd/- Sd/- Sd/- Sd/- (Pravas Kumar Singh) (Arun Goyal) (I.S. Jha) (P.K. Pujari) Member Member Chairperson