



सत्यमेव जयते

भारत सरकार/ Government of India  
विद्युत मंत्रालय/ Ministry of Power  
केन्द्रीय विद्युत प्राधिकरण/ Central Electricity Authority  
ग्रिड प्रबंधन प्रभाग/ Grid Management Division

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सं.: 12/एक्स/एस.टी.डी.(सी.ओ.एन.एन)/जी.एम./2024/ 56 दिनांक: 27.02.2024

**विषय:** दिनांक 14.02.2024 (बुधवार) को अपराह्न 12:30 बजे अध्यक्ष, के.वि.प्रा. द्वारा 31.03.2024 तक चालू होने वाले आर.ई. संयंत्रों के एफ.टी.सी. अनुप्रयोगों पर चर्चा करने के लिए बैठक का कार्यवृत्त।

**Subject :** Minutes of the Meeting taken by Chairperson, CEA, on 14.02.2024 (Wednesday) at 12:30 PM to discuss the status of FTC applications of RE plants likely to be commissioned by 31.03.2024.

अध्यक्ष, के.वि.प्रा., की अध्यक्षता में दिनांक 14.02.2024 को अपराह्न 12:30 बजे आयोजित बैठक का कार्यवृत्त आपकी जानकारी एवं आवश्यक कार्यवाही हेतु संलग्न है।

Please find enclosed herewith the minutes of the meeting held under the Chairmanship of Chairperson, CEA on 14.02.2024 at 12:30 PM., for information and necessary action

**संलग्नक:** यथोपरि।

(चन्द्र प्रकाश)

मुख्य अभियंता (ग्रिड प्रबंधन)

**बैठक के सभी प्रतिभागियों को ई-मेल द्वारा प्रेषित**

**Minutes of the Meeting taken by Chairperson, CEA, on 14.02.2024 (Wednesday) at 12:30 PM to discuss the status of FTC applications of RE plants likely to be commissioned by 31.03.2024.**

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List of the participants is enclosed at Annexure.

2. Welcoming the participants, Chairperson, CEA, mentioned that the meeting was scheduled to discuss the status of FTC (First Time Charging) applications and preparedness of the RE Projects which were envisaged for commissioning by 31.03.2024. He advised Member (GO&D), CEA, to briefly outline the status update on the agenda item of the meeting.

3. Member (GO&D), CEA, informed that as per the information shared by GRID-India, a total of 23 nos. of RE Plants with a cumulative quantum of 4305.98 MW (Wind- 960.58 MW, Solar-2607.4 MW and Hybrid – 738 MW) was expected for commissioning by 31.03.2024 and out of this 808.25 MW capacity was under process of getting FTC (First Time Charging) approval from GRID-India. Further, 2095 MW capacity which has been accorded FTC approval, is under trial run and yet to declare the COD (Commercial Operation Date). Also, the application for FTC approval was yet to be submitted by the developers of the balance 1402.73 MW capacity. He mentioned that the project-wise details do indicate some issues pertaining to trial run and declaration of COD as per the provisions of Indian Electricity Grid Code (IEGC), 2023. Thereafter, Chief Engineer (Grid Management), CEA, was requested to proceed with the presentation duly highlighting the plant-wise issues of the cited RE projects.

4. The detailed presentation was made by Chief Engineer (GM), CEA, outlining the major issues of the various RE projects as enumerated hereunder.

4.1 The Solar Project of M/s. Adani Solar Energy RJ Two Pvt. Ltd. getting connected at Fatehgarh-II Pooling Station of Powergrid, had an approved connectivity of 165 MW and FTC clearance was accorded for 59.95 MW. The RE Developer mentioned the expected COD of 59.95 MW in Feb.,2024 and 105.05 MW by 31.03.2024. It was informed that the FTC application for 105.05 MW was yet to be received in NRLDC and the Developer was asked to expedite the same.

4.2 The three Solar Projects of M/s. Adept Renewable Technologies Pvt. Ltd.(110 MW), M/s. Transition Energy Services Pvt. Ltd. (60 MW) and, M/s. Transition Cleantech Services Pvt. Ltd. (24.4 MW), with a total quantum of 194.4 MW at Prerak Pooling Station, were in the process of Trial Run after FTC approval. The COD of the Projects was expected in the last week of February,2024.

Representative of the Developer informed that there were some issues in performing Trial-Run as the dust level is quite high just after the construction work and the panels do not get proper irradiance due to which there is delay in performing the Trial-Run at rated capacity and hence requested for relaxation of the relevant provision. It was explained by Chairperson, CEA, that this issue could be handled by cleaning of the solar panels before commencement of the trial run.

4.3 In the context of the three Solar Projects – M/s. Renew Surya Ayaan Pvt. Ltd. (290 MW), M/s. Renew Surya Vihan Pvt. Ltd (98 MW) and, M/s. Renew Surya Patap Pvt. Ltd.

(197MW), with total capacity of 585 MW connected at Fatehgarh-III, the COD was expected by 31.03.2024. It was informed that except for 48.75 MW which was under process for FTC approval, the remaining capacity was under Trial-Run.

Representative of M/s Renew informed that the plants were injecting infirm power into the grid since 29.01.2024 while performing the Trial-Run as per the provisions in IEGC, 2023. He mentioned that RLDC is asking for NOC (No-Objection Certificate) from respective REIAs such as, SECI, even for sale of Infirm power through the Power Exchanges, which takes some time resulting in revenue loss.

In the context of the issue of demonstration of the rated capacity for completion of the trial run prior to COD, representative of Grid-India informed that as per clause 22(3)(b) and (d) of IEGC, 2023, the Solar & Wind plants have to perform trial with the requisite metering system, power plant controller, telemetry and protection system in service. The generating plant were to record the output of the unit(s) during the trial run and corroborates its performance with the temperature, solar irradiation and wind speed recorded at site with the performance charts. After completion of the trial run in the cited manner, receipt of documents and test reports, the concerned RLDC verify these documents and test reports, and issue a certificate of completion of successful trial operation to the concerned generating plants.

Regarding the sale of infirm power, representative of M/s SECI mentioned that as per IEGC, 2023 and DSM Regulations, the infirm power can be scheduled with no requirement of NOC upto completion of trial run. However, in case the RE Power Developer (RPD) enters into a third-party agreement during the term of PPA, which is from the effective date till the expiry of the PPA, the same is considered as breach of obligations under the PPA. SECI submitted that it is in the process of developing an internal SOP to deal with the issues of sell of infirm power during the trial operations of the RE plants.

Intervening on the issue of requirement of NOC, CMD, Grid-India mentioned that there are issues in third party sale of the infirm power and necessary safeguards need to be put in place so that RE plants do not delay the commissioning of the RE plants in the name of trial run without declaring the COD and keep selling the infirm power, as the commissioning period may go upto one year.

4.4 The next project discussed was the 300 MW Banderwala Solar Plant TP Surya Ltd. connected to Bikaner-II pooling station of Powergrid. It was informed that the final connectivity agreement was signed on 18.01.2024 and the FTC approval was being done. Regarding the dates of COD, it was stated that while 200 MW may get commissioned by Februray/March, 2024, the balance 100 MW may slip to end of May,2024.

4.5 In the context of 1000 MW Solar Project of M/s. Adani Renewable Energy Holding Four Limited getting connected at Khavda Pooling Station, it was informed that provisional FTC approval was given for 351.42 MW based on undertaking dated 30.12.2023 and another 200 MW was cleared for FTC on 07.02.2024. Trial Run of 551.4 MW was under progress but the status update on the undertaking dated 30.12.2023 was pending from the Developer. It was informed that the anticipated COD of the stated capacity was March,2024.

4.6 The FTC approval of the 200 MW Solar Project of M/s. Avaada Sunshine Energy Private Limited in Agar Solar Park, was stated to be under process. However, there was delay in commissioning of the 400/220 kV Pachora S/s along with 400 kV Pachora-Bhopal BDTCL

D/C line and there were some issues between the Solar Park Developer - RUMSL and M/s Avaada. The FTC application was yet to be submitted by the developer for the 220/33 kV Dudhpura substation. Representative of the RE Developer informed that the installation of the Project was complete and it could be commissioned by end of February, 2024.

4.7 In respect of the 300 MW project of M/s. Masaya Solar connected at Khandwa Pooling Station, the COD of 250 MW had been declared on 08.09.2023 and the provisional FTC has been accorded for the balance 50 MW on 08.02.2024 based on the undertaking to resolve the pending compliances by 28.02.2024.

4.8 Regarding the 23 MW Solar Project of NTPC Ltd. at Solapur, it was informed that 10 MW had been declared COD on 30.12.2022 and the balance capacity of 13 MW could be commissioned by 31.03.2024 subject to resolution of the compliances.

4.9 The 100 MW application of M/s SGEL at Radhanesda Pooling Station, was under process of getting FTC approval. Representative of Grid-India informed that out of the 700 MW planned capacity at Radhanesda Solar Park, 600 MW capacity of TPREL (100MW), GIPCL (100MW), ENGIE (200MW) and GSECL (200MW), stands commissioned. As per the connection agreement among GETCO, GPCL and SPDs, all the statutory and regulatory clearances are to be ensured by GPCL being the SPPD.

It was mentioned that a meeting was taken under the chairmanship of Member (GO&D), CEA on 01.11.2023 and it was directed that a combined study of 700 MW shall be carried out by SGEL in co-ordination with GPCL and submitted to WRLDC for FTC. Representative of M/s Tata informed that M/s SGEL is in the process of conducting the study of 700 MW through M/s Siemens in a months time and the reactive power compensation shall be installed by all the SPDs on proportionate basis.

4.10 In the context of the 252 MW Wind Project of M/s. Apraava Energy Pvt. Ltd. at Jam Khambaliya, FTC approval had been accorded for 205.8 MW capacity of which 138.6 MW was commissioned. FTC was pending for 23.1 MW and the balance capacity was under trial run. Capacity of 113.4 MW was expected for commissioning by 31.03.2024.

4.11 The status of 526 MW Wind Project of NTPC REL at Bhuj Pooling Station was discussed. Of the total capacity, COD of 426 MW was achieved on 04.11.2023 and FTC was to be applied for balance 100 MW which was targeted for commissioning by March, 2024. Further, scheduling was allowed upto 338 MW as per the compliant reactive capability.

4.12 Regarding 300 MW project of M/s. Netra Wind Pvt. Ltd. connected at Bhuj Pooling Station, the COD of 119.3 MW had been achieved on 01.09.2023 and the balance capacity was targeted by 31.03.2024. No major issue was cited for the commissioning activity.

4.13 In the context of the 300 MW Wind Project of M/s. Adani Wind Energy Kutch Four Ltd. connected at Bhuj-II pooling station, 189 MW was reported to have been declared COD and 72.7 MW was under trial run. The FTC application for 38.3 MW was yet to be submitted by the RE Developer.

4.14 The two Wind Projects of JSW Group connected to Tuticorin-II Pooling Station were taken up for discussion. Of the 520 MW Wind Project of M/s. JSW Renew Energy Ltd., 59.4 MW had been declared under COD and 45.9 MW was stated to be under trial run. While 243 MW was being targeted for commissioning by 31.03.2024, the FTC application for 137.7 MW was yet to be submitted by the RE Developer. Further, of the 300 MW capacity of JSW

Renew Two Energy Ltd., 232.2 MW had been declared under COD and balance 67.8 MW was slated for commissioning by 31.03.2024 of which COD for 13.5 MW was to be declared shortly.

4.15 In regard to 300 MW Wind Project of M/s. Renew Surya Roshini Power Pvt. Ltd. connected to Koppal Pooling Station, 235.62 MW had been declared under COD and balance 64.38 MW was targeted for commissioning by March,2024. Further, of the balance capacity 34.65 MW had been accorded FTC approval but the trial run was pending.

4.16 In case of the 300 MW Wind Project of Ayana Renewable Pvt. Ltd. connected to Koppal Pooling Station, 219.6 MW had been declared under COD and the balance 80.4 MW was being scheduled for commissioning by 31.03.2024. One issue of the mismatch in the 302.4 MW capacity as per the Trial Run Certificate and the approved connectivity quantum of 285 MW only, was highlighted. Representative of CTUIL informed that this mismatch was due to non-compliance of reactive power compensation by the RE plant. While the PPA was for 300 MW, the connectivity is approved for the quantum for which the RE plant is compliant at PoI as on date. Chairperson, CEA, suggested that this matter related to installed capacity and capacity approved for connectivity may be harmonized by CTUIL after discussions with the relevant stakeholders.

4.17 The status of two Hybrid Plants was discussed. The first one was the Hybrid project was of M/s. Renew Surya Roshni Pvt. Ltd. connected to Fatehgarh-III Pooling Station. The Project comprises of 380 MW Solar with 23 MW of BESS having 4 hours of storage. The FTC of the entire project is stated to have been cleared on 08.02.2024 but the trial run was yet to commence. The Project has approved connectivity of 380 MW. It was informed that 200 MW capacity would be commissioned by 31.03.2024 and balance 180 MW by 15.04.2024.

The second Hybrid Project was of M/s. Renew Surya Ojas Pvt. Ltd. connected to Koppal Pooling Station. The Project comprises of 322 MW Wind, 81 MW Solar and 75 MW BESS having 2 hours of storage. The Project has approved connectivity of 300 MW. With the available FTC approval, 183 MW of Wind capacity was under trial run and the entire project was anticipated to be commissioned by May,2024.

5.0 On seeking inputs on any of the related matters of Grid Connectivity, representative of RE developers informed that there was a need look into the criteria of maximum temperature for compliance at the Point of Interconnection (PoI), considering the limited occurrences of such high/extreme temperatures. It was mentioned that CEA has already requested the India Meteorological Department (IMD) for mapping and compiling the temperature data collected at their weather stations in the country.

6.0 After the detailed discussions and based on the submissions made by Grid-India, CTUIL and RE Developers, Chairperson, CEA directed the following:

- (a) SECI to prepare the SOPs with respect to the modalities for sale of infirm power by the RE plant in the Power Exchanges for the period of Trial-Run till the submission of Test Reports and declaration of COD. As per the submission of SECI, the RE Plants can sell the infirm power during the period of trial run without the requirement of NOC from the REIAs.
- (b) A meeting was to be scheduled with DG, IMD to discuss the mapping and compilation of weather station-wise temperature data across the country.

**The Meeting ended with a Vote of Thanks to the Chair.**

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**Annexure**

**List of the participants in the meeting held on 14/02/2024 at 12:30 PM**

**Central Electricity Authority (CEA)**

1. Sh. Ghanshyam Prasad, Chairperson
2. Sh. Hemant Jain, Member (Grid Operation & Distribution)
3. Sh. Chandra Prakash, Chief Engineer (Grid Management)
4. Sh. O.P Suman, Director (Grid Management)
5. Sh. Sandeep Kumar, Deputy Director (Grid Management)
6. Sh. Dhruv Kawat, Assistant Director (Grid Management)

**GRID-India**

1. Sh. S. R. Narasimhan, CMD
2. Sh. Rajiv Porwal, Director (SO)
3. Sh. S.C. Saxena, ED, NLDC
4. Sh. Vivek Pandey, GM
5. Sh. Abhijeet Prakash, Chief Manager

**Central Transmission Utility of India Limited (CTUIL)**

1. Sh. Ashok Pal, Dy. COO
2. Sh. PS Das, Sr. GM
3. Sh. Kashish Bhambhani, GM
4. Sh. Ajay Kumar, Asst. Manager
5. Sh. Roushan Kumar, Engineer

**SECI**

1. Sh. Shreedhar Singh, AGM
2. Smt. Anita Goel, DGM

**Representatives of RE Entities**

M/s NSEFI, M/s WIPPA, M/s Adani, M/s TATA Power, M/s Renew, M/s Ayana, M/s Avaada, M/s Apraava, M/s SGEL, M/s Netra, M/s JSW, M/s Mahindra, M/s Hero Future Energies, M/s Vena Energy, M/s Serentica, M/s Amplus Solar, M/s O2 Power, M/s Greenko, M/s NHPC REL, M/s Aditya Birla, M/s SPRNG Energy, M/s Hexa Climate, M/s EDEN Renewable, M/s ACME, M/s SolarPack