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

Present: Shri G. Mohapatra, Officiating Chairperson Shri S.K.Ray Mohapatra, Member

## Case No. 30/2022

GRIDCO Ltd.

Petitioner

Vrs.

DoE, GoO & others

..... Respondents

- In the matter of: Application under Section 86(1)(b)& (e) of the Electricity Act, 2003 read with Section 11(1)(e) of the OER Act, 1995 seeking for prior approval of Power Purchase Agreement(PPA) to be executed between GRIDCO Ltd. and M/s. Konark Suryanagari Pvt. Ltd. towards procurement of 10MW Grid-connected Solar power under MNRE, Govt. of India Scheme for "Installation of Grid-connected Solar Project & various off-grid applications for 100% Solarization of Konark Sun Temple and Konark town" towards fulfilling of RPO of the applicant.
- For Petitioner: Ms. Susmita Mohanty, DGM, (PP), GRIDCO & Shri Prasant Kumar Das, CGM (PP), GRIDCO Ltd.,
- Respondents: Ms. Sasmita Patjoshi, Joint Director, OREDA, Shri V. Wagle of TPCODL, Shri K. C. Nanda, GM (Fin.), TPWODL, Shri Binod Nayak, Asst. GM (Comm.), TPSODL, Ms. Malancha Ghose, AGM (RA), TPNODL and Shri Chandra Sekhar Mishra, the authorized representative of M/s. Konark Suryanagari Pvt. Ltd., Ms. Sonali Patnaik, ALO I/c., DoE, GoO and Shri R. P. Mahapatra.

## <u>ORDER</u>

## Date of hearing: 12.07.2022

Date of order:26.07.2022

The petitioner- GRIDCO Ltd has filed the present application under Section 86 (1) (b) & (e) of the Electricity Act, 2003 read with Section 11 (1) (e) of the OER Act, 1995 seeking prior approval of Power Purchase Agreement (PPA) to be executed between GRIDCO Ltd. and M/s. Konark Suryanagari Pvt. Ltd, the Solar Power Developer (SPD), towards procurement of 10MW Grid-connected Solar power project at Junagarh, Kalahandi (Odisha) developed under MNRE Scheme for meeting its RPO.

2. The petitioner GRIDCO has submitted that;

- a) Ministry of New & Renewable Energy (MNRE), Govt. of India vide their Office Memorandum dated 19.05.2020 have launched a Scheme for "Installation of Gridconnected Solar Project & various off-grid applications for 100% Solarization of Konark Sun Temple and Konark Town". Under this scheme, 10 MW grid-connected solar project and various solar off-grid applications will be set up through competitive bidding process with Central Financial Assistance (CFA) support of around Rs.25 crore from Government of India, out of which Rs.10 crore (Rs.1 crore/MW) is for the said 10 MW grid-connected solar PV project. Further, Odisha Renewable Energy Development Agency (OREDA) has been assigned to implement the above scheme. OREDA will be responsible for selection of project developers through competitive bidding process, monitor the implementation of the projects, ensure compliance of the Scheme and submit monthly progress reports to MNRE.
- b) The Chief Executive, OREDA communicated GRIDCO that M/s. Konark Suryanagari Pvt. Ltd, a Joint Venture (JV) company has been selected through competitive bidding process to develop the 10 MW grid-connected solar power project at Junagarh, Kalahandi under the aforesaid scheme and having quoted 'zero' Viability Gap Funding (VGF). The developer (a JV company) will sell power to GRIDCO at Rs.2.77/kWh i.e. at the APPC rate for a period of 25 years for which GRIDCO has to sign PPA with the developer.
- c) As per the terms of vesting orders, GRIDCO requested all the four DISCOMs in the State to convey their consent for procuring solar power from the said project. Further as requested by the developer, M/s. Konark Suryanagari Pvt. Ltd., GRIDCO has also circulated the soft copy of the draft PPA to the developer with intimation to OREDA.
- d) GRIDCO, being an obligated entity on behalf of the State DISCOMs, intends to procure the solar power from the said project under MNRE scheme to meet its RPO. Further, this scheme is for 100% solarisation of Konark Sun Temple and Konark Town which is of national importance. Furthermore, the levelised tariff of Rs.2.77/kWh determined through bidding process is also competitive.
- e) GRIDCO has submitted the draft PPA format along with the present application and has prayed the Commission to approve the same so that GRIDCO can entered into PPA with M/s. Konark Suryanagari Pvt. Ltd. to purchase 10 MW solar power from the aforesaid project developed under MNRE scheme.
- 3. The respondents TPWODL and TPSODL have submitted that;

- a) As per the terms of vesting orders, GRIDCO is required to obtain consent from the DISCOMs to sign any PPA. Accordingly GRIDCO has communicated to the DISCOMs to convey their consents for procurement of power from the subject 10 MW grid-connected solar PV project developed by M/s. Konark Suryanagari Pvt. Ltd. TPWODL and TPSODL have conveyed their consent to GRIDCO subject to approval of the Commission.
- b) The Government of India will provide one time VGF support with maximum ceiling of Rs.1 crore/MW keeping the solar tariff fixed at Rs.2.77/kWh i.e at Average Power Purchase Cost (APPC). The solar developer will sell power to GRIDCO at a tariff of Rs.2.77/kWh for 25 years from the COD. As the APPC of GRIDCO is on an increasing trend this PPA may be financially viable for future years and also contribute in the solar RPO target of GRIDCO.
- 4. In addition to the above, the respondent TPWODL has further submitted that;
  - a) In the matter of netting of energy, solar generators cannot be equated with thermal or hydel generators where auxiliary consumption is permitted for netting as their generating is on Round the Clock (RTC) basis. The solar generators may store energy to consume during no generation period through battery backup.
  - b) Presently the cost of power during night time is much higher due to outage of solar contribution and GRIDCO draws high cost power to meet the State demand. Further, TOD tariff permits industries to draw more with discount of 20 Paisa/unit which again increases pressure on GRIDCO. Around 16 solar generators under the area of TPWODL are consuming power for their colony and lighting of plant at night time. Ideally they should be consumers of DISCOM and needs to the billed as per commercial mechanism. Netting of energy was allowed earlier because the power purchase cost from solar generators was on higher side. As the scenario has already changed, now netting of energy is not commercially viable. Hence, the solar developer M/s. Konark Suryanagari Pvt. Ltd., under TPWODL area, needs to become a consumer of DISCOM and drawal from DISCOM may be billed under GP category.
  - c) In the instant case the generator is under TPWODL area & power to be used in TPCODL area. Eventually, through netting of energy it will offset BSP of one licensee & at other end it will be consumed by consumers of other licensee. As both

licensees are different legal entity with separate area of operation, offset with TPWODL's BSP may not be permitted.

- d) Further, the cost of power is Rs.2.77 per unit whereas GRIDCO's average power purchase cost is Rs.2.96 per unit (approved for FY 2022-23). If netting of energy is permitted, it will be with highest BSP of Rs.3.60 per unit. As a result, the loss of margin would be 83 paise per unit.
- e) Further, the Commission vide Case No. 57 of 2020, has recently allowed M/s. PGCIL to become consumer of DISCOMs even for their auxiliary consumption at different Grid sub-stations across State. The Commission may direct the SPD M/s. Konark Suryanagari Pvt. Ltd. to become a consumer of TPWODL for its consumption during no generation period
- 5. The respondent TPCODL has submitted that;
  - a) The bidding conducted was on VGF with a fixed tariff of Rs.2.77/kWh which was the Average Power Purchase Price (APPC) at the time of bidding. The selected developer M/s. Konark Suryanagari Pvt. Ltd. has not sought any VGF and has agreed to supply power at Rs.2.77/kWh. GRIDCO needs to explain the process followed under competitive bidding and various bidders who have participated in the bidding process to discover the tariff of Rs.2.77/kWh. However TPCODL is agreed to purchase of this power at the tariff of Rs.2.77/kWh which is reasonable.
  - b) As understood from Annexure-6 of the petition, the developer M/s. Konark Suryanagari Pvt. Ltd. has sought GST compensation. TPCODL do not agree with this proposal of GST compensation. The tariff has been fixed at the APPC as such and change in tariff on account of GST compensation, payable if any, should be part of separate proceedings before the Commission and the tariff of Rs.2.77/kWh should remain fixed at this point of time.
  - c) The Clause 17.2.1 of the draft PPA stipulates that, "This agreement shall be subject to jurisdiction of the appropriate Civil Court at Bhubaneswar, Odisha/ Orissa High Court, Cuttack to the exclusion of all other Courts". TPCODL suggests that since this is a PPA between a generating company and GRIDCO, this should be subject to the jurisdiction of the State Commission i.e. OERC as per Electricity Act, 2003 and not Hon'ble High Court. The Commission may direct for suitable amendments in the PPA in this regard.

- 6. The respondent M/s. Konark Suryanagari Pvt. Ltd. has submitted that;
  - a) The subject 10 MW grid-connected solar project is not a consumer or not linked with any industrial unit and hence, should be treated as an IPP like other RE IPPs installed in the State of Odisha where 'Netting' of energy is already applied.
  - b) The project will have the connectivity on 33 KV side of Junagarh Grid Sub-station of OPTCL for power evacuation and nowhere the power plant is connected with the DISCOM's network in the power evacuation plant. There is no source of power available at the designated plant location.
  - c) Auxiliary consumption, power for office use of the solar plant and during nongenerating hours (generally in night time) should be adjusted with the solar generation from this IPP i.e. Netting (Net export – Net import) of energy is to be considered and this accepted by GRIDCO, OREDA & TPCODL during hearing.
  - d) The project is having national importance and monitored by the Central Government, where Government of Odisha has provided land on zero lease basis for which developer did not opt for VGF offered by MNRE and bid only for benchmark tariff of Rs.2.77/kWh which is the lowest till date without VGF.
  - e) The Commission may consider the above submissions and provide in-principle approval for execution of PPA.
- 7. The respondent OREDA has submitted that:
  - a) The subject 10 MW ground-mounted Solar PV Project at Junagarh in Kalahandi District is away from the cyclone prone area and dedicated for 100% solarisation of Konark Town. It is expected that it will be able to offset the total consumption of Konark Town.
  - b) There will be electronic display boards at SPV Project site as well as at 2 or 3 prominent places in Konark Town to display the hourly energy generation, grid consumption at 33 kV side of 33/11 kV sub-station of TPCODL at Konark, reduction in Carbon Dioxide (CO<sub>2</sub>) emission and reduction in overall carbon foot print etc.
  - c) The request of M/s. Konark Suryanagari Pvt. Ltd. for netting of power i.e. power exported to grid and power imported from grid towards auxiliary consumption and night use (control room consumption and plant lighting) may be considered by the Commission as the same is being done in case of other solar developers in the State.
  - d) The representation of M/s. Konark Suryanagari Pvt. Ltd. towards increase in project cost due to increase in GST from 5% to 12% on solar modules and equipments, will

be a feasible case under "change in law' provisions under the PPA as the enhancement of GST has took place after the tender.

- e) The State Government has already allotted 41.58 Acres of land for this project on lease basis and hence, the solar developer can start the project implementation work at the earliest.
- f) The signing of PPA between GRIDCO and the developer M/s. Konark Suryanagari Pvt. Ltd. is an important matter as the PPA signing date is the zero date for implementation of the project. Hence, the Commission may kindly approve for signing of the said PPA.
- 8. The respondent Sri R.P. Mahapatra has submitted that;
  - a) At para 1 (xix) of the PPA, in the definition of EBC, the word 'GRIDCO' may be deleted, as the Commission has already held that the so called EBC of GRIDCO is not a legal entity.
  - b) At para 3.2.1 of the PPA, scheduling of power by SLDC is not permissible as the solar PV power plants are must run stations. Further the matter of tariff for excess generation (beyond CUF of 19+10%) and penalty for shortfall of energy have already been provided in para 4.1 and 5.2 of the PPA. Therefore, para 3.2.1 may be deleted.
  - c) At para 6.1.1 of the PPA, the words 'Energy Billing Centre (EBC)' may be deleted as it normally refers to EBC of GRIDCO.
  - d) At para 7.1.1 of the PPA, the words 'EBC data' may be deleted. Further, the word 'promptly' may be substituted by the words 'within 4<sup>th</sup> of the succeeding month'. Further the words 'failing which the SPD shall be entitled to bill GRIDCO based on the joint meter reading on the 1<sup>st</sup> day of every month taken by OPTCL and the SPD as provided in para 10.1.1' may be added at the end of the para 7.1.1.
  - e) Para 8.2 (viii) of the PPA may be deleted, because the provisions of this para may not be acceptable as GRIDCO has already agreed for installation of 10 MW Solar PV plant and has not raised any issue regarding evacuation of power by OPTCL who has already issued clearance. In case the present power evacuation system becomes inadequate to evacuate total power from the 10 MW solar plant due to evacuation of other loads, it shall be the responsibility of OPTCL to strengthen the evacuation system prior to connecting any new load. The Solar plant cannot be asked to restrict the injection to the State grid to the extent of available power evacuation system. The temporary curtailment of generation from the solar plant is to be made only under para 8.2 (xvi).
  - f) At para 8.2 (xii) of the PPA, there should be no scheduling of power as the solar PV plant is a must run station.
  - g) Sub-para (c) of para 8.2 (xvi) of the PPA should provide for specific requirement instead of making a general provision.

- h) At the end of the 1<sup>st</sup> sentence of para 18.8 of the PPA, the words 'subject to approval of OERC' may be added.
- i) Copies of (a) Request for Selection (R f S), (b) Quotation of the Solar Power Developer and (c) LOA No.3061(3)/OREDA dated 24.11.2021 may also be attached as Schedule – 2,3, & 4 respectively for ease of reference and for proper interpretation of any provision in the PPA.
- 9. In its rejoinder, the petitioner GRIDCO has submitted that;
  - a) The terms and conditions of the present draft PPA is in line with the recent PPAs executed by GRIDCO with other solar developers towards procurement of power.
  - b) As per the MNRE guidelines related to Rooftop PV & Small Solar Power Generation Programme (RPSSGP) Scheme, auxiliary power consumption for plant operation is permitted within the plant premises and will be subtracted from the total generation to arrive at actual/net generation from the power plant. In case of all the solar plants under the scheme, from which GRIDCO is availing power, the import energy from the grid is being subtracted from the export energy of the plants for billing of monthly energy. The same procedure is also being followed by GRIDCO for all the solar projects commissioned in the State.
  - c) Though, there is provision in all PPAs for drawal of power by the developers for office use of the plant and/or during night time shall be billed by the respective DISCOM to the developer as per their prevailing tariff, no Solar Power Developer (SPD) has become a consumer of the DISCOMs yet. Accordingly, netting of energy (export energy import energy) is being considered by GRIDCO for monthly accounting of energy export by all the existing SPDs. Hence, GRIDCO has no objection for netting of the monthly energy of the present SPD.
  - d) Though, the solar PV power plants are 'must run', but as per scheduling and despatch procedure of Odisha Grid Code Regulations, 2015, the RE generator are required to scheduled their power only to maintain the reliability and stability of the grid system.
  - e) Considering the present Intra-State ABT scenario, billing on Joint Meter Reading (JMR) basis is not possible for energy accounting. DISCOMs have expressed their unwillingness to take JMR. As per Article 7.1.1 of the draft PPA, the monthly billing shall be done on the basis of energy account statement certified by SLDC/EBC as per the meters installed at the metering point.

- f) All the terms and conditions of the draft PPA are mutually agreed by both, GRIDCO and M/s. Konark Suryanagari Pvt. Ltd. and no objection has been raised by the SPD.
- 10. Heard the petitioner and respondents through virtual mode and their written notes of submissions are taken into record. The Commission observed that the subject 10 MW grid connected solar PV project is to be developed for 100% solarisation of Konark Sun Temple and Konark Town under the MNRE scheme with VGF to bring the tariff to the level of APPC rate and OREDA has been assigned the task of implementing this Scheme by selecting the project developer through competitive bidding process. Accordingly, the developer M/s. Konark Suryanagari Pvt. Ltd. has been selected to develop the said solar project at Junagarh in Kalahandi District. M/s. Konark Suryanagari Pvt. Ltd. has not sought any VGF and agreed to supply power at Rs.2.77/KWh which was the APPC at the time of bidding. The petitioner GRIDCO has sought approval of the Commission to execute PPA with the project developer to purchase power from the said 10 MW Solar PV Project which will help GRIDCO towards meeting its RPO. The Respondents have agreed with the above proposal of GRIDCO except certain issues as discussed in the following paragraphs.
  - 11. The Commission observed that the developer M/s. Konark Suryanagari Pvt. Ltd. has requested for consideration of netting of power (net export – net import), since they have to draw power from grid for auxiliary consumption, lighting of the plant premises and their office use during non-generating hours (generally at night). GRIDCO and OREDA have agreed to the above suggestion of the solar developer and during hearing TPCODL has stated that they have no objection to it. But TPWODL is not agreed to it, as the plant is to be developed in its area and the power will be utilized in the area of TPCODL. GRIDCO has stated that netting of energy is now being considered for monthly accounting of energy export in case of all the solar generators in the State, although the PPAs provide for drawal of power by the developer for office use of the plant or during night time which shall be billed by the respective DISCOM to the developer. The instant draft PPA also provides the same. The Commission observed that as per the PPA the net electrical energy delivered to the Grid at metering point shall be the gross generation less auxiliary consumption of the solar power project. As per the CERC (Terms and Conditions for Tariff determination from the Renewable Energy Sources) Regulations, 2020, the Commission shall determine the project specific tariff

by approving auxiliary consumption which shall be maximum 0.75% of the gross generation. But in the instant case the Commission is not going to determine the project specific tariff, as the tariff has already been decided through competitive bidding process. The Commission further observed that as per the solar developer, the solar power plant will be connected with the 33 kV bus of 132/33 kV Junagarh grid substation of OPTCL for evacuation of power and no other source of power is available at the designated plant location to meet auxiliary consumption including night time requirement of power. As the SPD would be connected to 33 kV system of OPTCL beyond the feeder metering point of TPWODL i.e. before the drawal point of DISCOM which is eventually part of the transmission system, the Commission is of the view that if netting of energy is made in the present case, TPWODL will not be affected. This is similar to other cases of solar generators which are connected to 33 kV busbar of OPTCL transmission system. Therefore, Commission now allow netting of energy to arrive at the net export from the said 10 MW solar PV plant of M/s. Konark Survanagari Pvt. Ltd. after considering auxiliary consumption and power requirement for office use & plant lighting. Accordingly the relevant provision in clause no. 8.3 (iv) of the PPA needs to be modified. However, M/s. Konark Suryanagari Pvt. Ltd. should export the assured quantum of energy within the energy band as provided in clause no. 4.1 of the PPA.

- 12. The Respondent TPCODL, referring to the Annexure-6 of the petition, has stated that the GST compensation sought by the developer M/s. Konark Suryanagari Pvt. Ltd. in its letter to OREDA is not acceptable to TPCODL as the tariff has been fixed at APCC through competitive bidding process. The Respondent OREDA in its submission has stated that the representation of M/s. Konark Suryanagari Pvt. Ltd. for enhancement of project cost as a result of increase in GST from 5% to 12%, can be considered under 'change in law' provisions under the PPA as upward revision of the GST took place after the submission of the tender. However, neither the petitioner GRIDCO nor the project developer M/s. Konark Suryanagari Pvt. Ltd. has raised this issue of GST compensation before the Commission in their submissions during the proceeding. Be that what it may, issue of revision of GST can very well be settled between the parties within the provisions of the PPA.
- 13. As per Clause 17.2.1 of the PPA this agreement shall be subject to the jurisdiction of appropriate Civil Court at Bhubaneswar/ Orissa High Court to the exclusion of all other

Courts. The respondent TPCODL has stated that since this is a PPA between a generating company and a licensee, this should be subject to the jurisdiction of the State Commission i.e. OERC as per the Electricity Act, 2003 and not Hon'ble the High Court of Orissa. The Commission directs both GRIDCO and the project developer M/s. Konark Suryanagari Pvt. Ltd. to bring about necessary amendment in the PPA acceding jurisdiction of OERC in case any dispute arises in implementing the PPA.

- 14. The Respondent Shri R P Mahapatra has suggested certain amendments in various Clauses of the draft PPA on the matter of billing of export energy based on the data of Energy Billing Centre (EBC) of GRIDCO, scheduling of such solar power, implementation of joint meter reading of exported energy and power evacuation system. The petitioner GRIDCO in its rejoinder has given replies on these issues. We find that both GRIDCO and the project developer M/s. Konark Suryanagari Pvt. Ltd. have convergence on the aforesaid issues which are not detrimental to the interest of the state consumers. Therefore, we are not inclined to interfere in the provisions already incorporated in the draft PPA on the above issues. In addition to that Shri Mahapatra has suggested for modification of Clause 18.8 of the PPA, which deals with Amendments of the PPA, by insertion of the words 'subject to approval of OERC' at the end of the first sentence of that Clause. We accept the same and direct both GRIDCO and M/s. Konark Suryanagari Pvt. Ltd. to incorporate the same in the Clause 18.8 of the PPA.
- 15. With the above observations and directions, the Commission accords in principle approval for purchase of solar power by GRIDCO from the subject 10 MW solar PV project at Junagarh, Kalahandi which is being developed under MNRE scheme by M/s. Konark Suryanagari Pvt. Ltd. and directs both the parties to make necessary amendments in the draft PPA as per our observations in this order and submit the final PPA to the Commission for appraisal.
- 16. Accordingly, the case is disposed of.

Sd/-(S. K. Ray Mohapatra) Member Sd/-(G. Mohapatra) Officiating Chairperson