# Rajasthan Electricity Regulatory Commission

### Petition No. RERC/1883/2021

Petition filedunder Section 86(1)(f) of the Electricity Act, 2003 read with Regulation 5 & 6.1 of the RERC (Rajasthan Electricity Grid Code) Regulations, 2008 and Regulation 72 of the RERC (Transaction of Business) Regulations, 2005 seeking appropriate directions and orders.

#### Coram:

Shri Shreemat Pandey, Chairman Shri S. C. Dinkar, Member Shri Prithvi Raj, Member

Petitioner : M/s Clean Wind Power (Devgarh) Private Limited

Respondent: 1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.

2. Jaipur Vidyut Vitran Nigam Limited

3. Rajasthan State Load Despatch Centre

4. M/s. Palimarwar Solar House Pvt. Ltd.

Date of hearings: 09.03.2021 and 17.03.2021

Present : 1. Sh. Aniket Prasoon, Advocate for Petitioner

2. Sh. Umang Gupta, Advocate for Respondent 1 & 3

Order Date: 23.03.2021

#### **ORDER**

1. Petitioner has filed this petition along with stay application on 02.02.2021under Section 86(1)(f) of the Electricity Act, 2003 read with Regulation 5 & 6.1 of the RERC (Rajasthan Electricity Grid Code) Regulations, 2008 and Regulation 72 of the RERC (Transaction of Business) Regulations, 2005 seeking appropriate directions and orders.

- 2. Notices were issued to Respondents on 02.02.2021 to file reply to the petition. Respondent Rajasthan Vidyut Prasaran Nigam Ltd. (RVPN) and Rajasthan State Load Despatch Centre (SLDC) filed their common reply on 09.03.2021. Petitioner filed rejoinder to the reply on 16.03.2021.
- 3. Respondent Jaipur Vidyut Vitran Nigam Limited (JVVNL) and M/s. Palimarwar Solar House Pvt. Ltd. have not filed their reply in writing.
- 4. The matter was finally heard on 17.03.2021. Sh. Aniket Prasoon, Advocate appeared for Petitioner. Sh. Umang Gupta, Advocate appeared for Respondent RVPN and SLDC.
- 5. Petitioner in petition, rejoinder and during hearing submitted as under:
- 5.1. Petitioner is a generating company and engaged in the business of generation and sale of wind energy. The Petitioner owns and operates two wind power projects of 36 MW and 4 MW respectively, being cumulatively 40 MW at Village Gunga, situated at Tehsil Sheo, District Jaisalmer in the State of Rajasthan for sale of entire (100%) electricity to Jaipur Vidyut Vitran Nigam Limited (JVVNL).
- 5.2. Rajasthan Renewable Energy Corporation Ltd. (RREC), being State Nodal Agency for promoting and developing renewable energy in Rajasthan, vide its letter dated 29.04.2014 granted approval of power evacuation arrangement for 40 MW to M/s Gamesa Wind Turbines Private Limited (Gamesa/Developer) for the Petitioner's Wind Projects thereby allowing the Petitioner to evacuate the entire power generated by its plants (up to the total capacity of 40 MW) to 132/33 kV Sheo Grid Sub Station.
- 5.3. Petitioner, Gamesa and JVVNL entered into a Power Purchase Agreements on 05.02.2015 and 18.03.2015 for sale of entire 36 MW and 4 MW wind power from its wind power projects to JVVNL.

- 5.4. Petitioner's Wind Projects achieved connectivity to the RVPN's Sheo Substation for the initial capacity of 36 MW and 4 MW (i.e., cumulatively capacity of 40 MW) on13.02.2015 and 18.03.2015 respectively. It is to be noted that the said Sheo Sub-station presently has a total capacity of 75 MW. Details of the existing load connected to the said Sub-station as well the available spare capacity are as follows:
  - i. Clean Wind Power (Devgarh) Pvt. Ltd. 40 MW;
  - ii. Power Project owned by another IPP 9.75 MW; and
  - iii. Spare Capacity 25.25 MW
- 5.5. It recently came to the Petitioner's knowledge that the RVPN vide its letter dated 17.06.2019 has granted approval of power evacuation arrangement for 40 MW (2x20 MW) solar power project owned by M/s Palimarwar Solar House Pvt. Ltd. thereby allowing it to construct and commission its solar project and evacuate the power generated by it through the Sheo Sub-Station.
- 5.6. It is pertinent to note that the power evacuation arrangement approval granted by RVPN to Palimarwar's Project is for 40 MW, which clearly exceeds the current spare capacity of the Sheo Sub-station, i.e., 25.25 MW. If this remains the case, then there will be an excess load of 14.75 MW power being despatched to the Sheo Sub-station which would overburden the said Sheo Sub-station and its repercussions will inevitably extend to the existing and operational projects which are already connected to the Sheo Sub-station, including the Petitioner's Wind Projects, as they are very likely to face evacuation constraints resulting into curtailment of generation by SLDC.
- 5.7. Petitioner vide its letter dated 16.10.2020, highlighted the above-mentioned facts to the RVPN and proposed that in the interest of the existing projects connected to the Sheo Sub-station, Palimarwar's solar project should not be allowed to commission and despatch 40 MW of power from the Sheo

Sub-station, until and unless the system is strengthened by way of augmenting/replacing the transformer(s) and associated equipment's to bear the additional load of 14.75 MW. In alternate Palimarwar's solar project should be allowed to evacuate power only up to the spare capacity of the Sub-station, i.e., up to 25.25 MW. However, Petitioner has received no response to the same from RVPN till date.

- 5.8. Furthermore, this action of RVPN is also in conflict with the Clause 4.1 (iii) of the PPAs. Clause 4.1 (iii) provides that RVPN has the right to connect additional load to the interconnection feeder but the same can happen only after ensuring that it would not adversely affect the interests of the existing users of the same feeder.
- 5.9. The same is further substantiated by Regulation 6.1 (ii) of the RERC (Rajasthan Grid Code) Regulations, 2008(Rajasthan Grid Code) which provides that any new user getting connected to the State Transmission System shall not cause any adverse effect on the existing users of the grid.
- 5.10. It is significant to mention that Regulation 5.1 of the Rajasthan Grid Code mandates STU, i.e., RVPN for reinforcement or State Transmission System extension in case of an increase in the system capacity to remove operating constraints and to maintain security standards. Further, the STU is also required to ensure that the Transmission System development is planned in advance with sufficient lead time, for detailed engineering, design and construction work and the time required for obtaining statutory approvals from various agencies for implementation of the scheme(s).
- 5.11. Regulation 4.3 of the Rajasthan Grid Code also mandates STU to ensure planning and co-ordination relating to Intra-State Transmission System involving power evacuation of the generating stations, for supply to the entities engaged in distributing electricity. Further, Regulation 5.3 of Rajasthan Grid Code provides that the planning criterion should be based

- on the security philosophy as per Transmission Planning Criteria and CEA guidelines on which ISTS and STS have been planned.
- 5.12. Therefore, RVPN is obligated to ensure that the System is equipped enough to manage the power despatched to it and to undertake the exercise of System Planning/strengthening as and when required, which the RVPN has clearly not undertaken in the present case.
- 5.13. As per Clause 4.1(xv) of the PPAs that RVPN/JVVNL are under an obligation to evacuate all the delivered energy. However, the SLDC can issue curtailment/ back-down instructions to the power developers only on account of inspection/repair/maintenance of the grid; safety of the equipment or personnel of the RVPN and any other technical requirement to maintain the grid discipline and security.
- 5.14. None of the aforesaid clauses of the PPAs including specifically Clause 4.1(iii) of the PPAs as well as Regulation 6.1 of the Rajasthan Grid Code allow the Respondents to create/manufacture such a situation which inevitably will result into consistent and continuous curtailment of power from Petitioner's existing and operational Wind Projects. On the contrary, the specific mandate is that on account of connectivity being provided to a new power project, the existing connected operational power projects should not adversely suffer in any manner. By any stretch, creating or manufacturing any situation to the contrary which adversely affects the evacuation of power from Petitioner's Wind Projects is prima facie arbitrary and illegal.
- 5.15. Conduct of RVPN is also in violation of Regulation 5.2(u) of the Indian Electricity Grid Code in terms of which a RE based power project is given a Must Run status and thereby it can be curtailed only as a last resort and solely for the purpose of maintaining grid security.
- 5.16. The action of the RVPN is violative of the principles of natural justice, as it

failed to consult or bring into the notice of the existing users that RVPN is providing evacuation approval to a power developer in excess of the spare capacity of the Sub-station which in all probability, have repercussions on their power projects. Also the actions of the RVPN are violative of the principle of 'promissory estoppel' as RVPN being a wholly owned Government Company performing functions of a public utility must be guided by principles of fairness and transparency and must not act in an arbitrary manner.

- 5.17. The responsibility and duty of RVPN to effectively and prudently manage and plan the system, is provided for in the Rajasthan Grid Code, and the same, also finds mention in the PPA entered into between the Petitioner and the JVVNL. Hence, the present dispute falls, without any iota of doubt, under the ambit of the Commission under Section 86(1)(f) of the Electricity Act and hence is maintainable before the Commission.
- 5.18. Generation from any renewable generation plant is linked with the wind speed for wind generating plant and solar irradiation for solar generating plant respectively. Both these types of generation do not have any interlinking between them and generation from these sources can reach their peak power as per plant capacity at any given time during the day (or during solar generating hours for solar power plants) and hence, it is improper to plan the substation capacity based on a misconceived and erroneous premise that when solar generation is more, it is given that the wind generation would be less or vice versa. Thus, only taking into consideration the daily aggregated generation is technically wrong for planning the sub-station capacity. Therefore, reliance by the RVPN on certain dates and time duration in the month of June 2020 is faulty and without any basis and should be out rightly rejected.
- 5.19. If on a particular day, the connected generating plants to a sub-station despatch power upto 100% or even 90% of their contracted capacity and

the Discom load requirement for that particular day is negligible or zero, then the entire burden of the despatched power would fall upon the concerned transformer to accommodate the injected power and would in that scenario effectively result in backing down instructions being issued to the power projects connected to the Sheo Sub-station. Therefore, being the STU and State Load Despatch Centre, the RVPN should undertake the exercise of system planning and strengthening assuming that all the connected generating plants/units will generate and despatch power upto their maximum capacity/name plate capacity and not base their analysis on mere conjectures and surmises. Such intent and action are required on their part to ensure grid safety and stability under all circumstances.

- 5.20. Petitioner had filed a Writ Petition bearing CWP No. 14694 of 2020 along with Interlocutory Application before the Hon'ble High Court of Rajasthan, Jaipur Bench (Hon'ble High Court) seeking appropriate directions. The Hon'ble High Court after considering respective submissions of the parties, considered the functions of State Electricity Regulatory Commission under Section 86(1)(f) of the Electricity Act and observed that the said provision specifically confers power on this Commission to adjudicate the dispute between licensees and generating companies. Accordingly, the Hon'ble High Court vide its order dated 18.01.2021 directed this Commission to adjudicate the dispute within a period of two months from the date of filing of the petition by the Petitioner.
- 5.21. In view of the facts and submissions made hereinabove, it is prayed to:
  - (a) hold and declare that evacuation approval grant by RVPN to Palimarwar's solar project, shall in no manner adversely and arbitrarily impact the evacuation of power from the Petitioner's existing and operating Wind Projects on account of grant of such evacuation approval to Palimarwar's solar project;

- (b) direct the RVPN to take necessary and immediate steps to strengthen the relevant evacuation system before granting necessary approvals to Palimarwar's solar project in order for its project of 40 MW to inject power into the grid;
- (c) direct that in the meanwhile till such time the system strengthening of the Sheo Sub-station and the associated facilities is undertaken by the RVPN, the Palimarwar's project be allowed to evacuate power only to the extent of the spare capacity of the Sheo Sub-station, i.e. 25.25 MW.
- 6. RVPN and SLDC in their reply has submitted as under:
- 6.1. Present petition is filed on the "probability" and "apprehension" that the decision of the RVPN to grant evacuation approval to Palimarwar's project might result in adverse implication affecting the wind projects of the Petitioner. Therefore, the Commission may not entertain the present petition on the assumptions, probabilities, possibilities and apprehensions of the Petitioner.
- 6.2. Commission under Section 86 (1) (f) can adjudicate upon the disputes between the 'licensees' and 'generating companies' and refer the same for arbitration. SLDC is neither licensee nor generating company falling within the definition of Section 2 (28) and Section 2 (39) of the Electricity Act, 2003. Therefore, the present petition has wrongly been filed against the SLDC.
- 6.3. Grievance or dispute raised by the Petitioner is flowing from the PPA dated 05.02.2015 entered between the Petitioner, M/s. Gamesa Wind Turbines Pvt. Ltd. and JVVNL. RVPN not being a party and signatory to the said PPA is liable to be deleted from the array of parties and no order or decision be passed against the RVPN.
- 6.4. As per Clause 4.1(v) of the said PPA, the decision of RVPN/JVVNL about the extent of power evacuation facility available in the system shall be final

and binding on the Power Producer. As per Regulation 4.2 of RERC (Rajasthan Electricity Grid Code) Regulations, 2008, SLDC is the apex body to ensure the integrated operations of the power system in the State of Rajasthan and the RVPN and SLDC has duly acted in conformity with the Rajasthan Electricity Grid Code and therefore, there is no scope for interference by this Commission.

- 6.5. Further, as per Regulation 7.13 of Rajasthan Grid Code, State Generating Station shall follow the SLDC instructions for backing down/ boxing up and shutting down the generating unit(s). SLDC shall certify the period of backing down/boxing up or shutting down for computing the deemed generation, if so required in the PPA.
- 6.6. Total Wind power plants sanctioned and commissioned at 33 kV voltage level at 132 kV Sheo GSS is 49.75 MW which comprises of 40 MW of Wind power plant sanctioned to the Petitioner whereas 9.75 MW of the Wind power to M/s. Suzlon
- 6.7. There are about 8 to 10, 33 kV feeders of Jodhpur Discom emanating from 132 kV Sheo GSS. Existing wind power plants of capacity of 49.75 MW are connected at 33 kV voltage level at 132 kV Sheo GSS which directly feed the load of Discom connected through the 33 kV feeders of the Discom and after feeding from the load of Discom, the balance power is thereafter stepped up through the existing 75 MW, 132/33 kV transformers of the RVPN.
- 6.8. During the year 2020-2021, the maximum wind generation was recorded in the month of June 2020 and data/chart showing the maximum wind generation, Discom load at the time of maximum wind generation, the balance power/load on the 75 MVA, 132/33 kV transformers tabuled as under:

Wind generation during Night Hours (at maximum)

Date	Max. Wind generation between 00 Hrs to 9 Hrs & between 16 Hrs to 23 Hrs	Discom load at the time of Max. Wind generation	Total load on 75 MVA 132/33 kV transf. at the time of Max. Wind gen.	Load on 132 kV Sheo- Barmer line at the time of Max. Wind generation	Load on 132 kV Sheo- Sangar line at the time of Max. Wind generation	Load on 132 kV Sheo- Undoo line at the time of Max. Wind generation
3.6.2020	39.54	13.43	(-)25.94	4.42	11.16	10.74
7.6.2020	28.05	5.71	(-)22.34	11.4	3.37	7.58
16.6.2020	41.37	18.17	(-)23.20	34.06	34.11	23.16
17.6.2020	41.77	10	(-)31.77	47.18	61.05	17.89
19.6.2020	45.89	14.97	(-)30.91	16.81	0.00	14.11

Wind Generation Between 10 am – 3 pm (When Solar Generation would be at maximum)

Date	Max. Wind generation between 10.00 Hrs to 15.00 Hrs	at the time of Max. Wind generation	132/33 kV transf. at the time of Max. Wind gen.	kV Sheo- Barmer line at the time of Max. Wind generation	kV Sheo- Sangar line at the time of Max. Wind generation	Load on 132 kV Sheo- Undoo line at the time of Max. Wind generation
3.6.2020	35.34	6.51	(-)29.03	9.05	23.15	14.1
5.6.2020	25.02	1.08	(-)23.95	18.89	NR	5.05
6.6.2020	5.20	13.54	8.34	50.52	26.18	16.00
7.6.2020	5.60	19.71	14.11	13.26	46.31	18.94
8.6.2020	5.77	23.71	17.94	64.68	29.47	17.26
9.6.2020	3.77	17.20	(-)13.44	64.36	27.36	23.57
11.6.2020	18.17	33.25	15.08	53.05	68.83	15.78
12.6.2020	2.05	18.00	15.96	47.20	16.84	14.31
13.6.2020	4.57	20.22	15.65	39.65	11.36	12.63
14.6.2020	0.11	23.02	22.91	59.15	17.68	18.52
15.6.2020	2.57	28.34	25.77	64.95	16.42	19.36
16.6.2020	4.62	24.86	20.24	69.80	25.68	23.78
17.6.2020	37.2	29.45	(-)7.75	52.84	62.94	17.68
19.6.2020	35.42	30.91	4.52	21.90	NR	26.31
22.6.2020	6.00	35.34	26.95	21.47	69.36	19.78
23.6.2020	8.75	36.24	27.49	34.98	87.45	25.47
24.6.2020	8.45	30.11	21.66	24.42	67.55	21.47
25.6.2020	12.17	33.56	21.39	40.71	NR	19.32
27.6.2020	38.28	15.82	(-)22.46	7.28	6.59	23.15
28.6.2020	44.51	13.77	30.74	3.17	5.89	21.68
29.6.2020	33.65	37.94	4.29	39.42	5.87	29.26

6.9. RVPN also obtained the wind generation, Discom load at the 132 kV Sheo GSS for the month of January, 2021 and February, 2021 and it can be seen that for the month of January, 2021 and February, 2021 either there was Page 10 of 13

sufficient Discom load on the 33 kV feeders, where the balance power required to be stepped up through the existing 75 MVA 132/33 kv transformers was not needed much or for the month of February, 2021 the wind generation was itself very low.

6.10. The details and figures as mentioned above would clearly demonstrate that there is sufficient and enough spare capacity left at the 132/33 kV transformer of 75 MVA which shall allow the Solar Power Plants to be sanctioned at 33 kV voltage of 45 MW. Therefore, even on technical grounds as well as on merits, no case is made out in favor of the Petitioner and is not entitled to any relief as sought for by the Petitioner in the present petition.

## Commission's view

- 7. We have considered all the submissions, documents made by the parties and arguments made during the course of hearings.
- 8. Petitioners submitted that its wind power projects of 40 MW, situated at District Jaisalmer, achieved connectivity to the RVPN's Sheo Sub-station for entire capacity on 18.03.2015. The Sheo Sub-station presently has a total capacity of 75 MW.
- 9. According to the Petitioner, RVPN has granted new evacuation approval to M/s. Pali marwar Solar House Pvt. Ltd. for capacity of 40 MW which exceeds the available spare capacity of the Sheo Grid Sub Station thereby jeopardizing the interests of the existing users of the Sheo Sub-station including the Petitioner as the new connection to M/s. Pali marwar in all probability, would result in adverse implication on the evacuation of power from the existing Wind Projects of the Petitioner.
- 10. Petitioner submitted that the action of RVPN is in conflict with the Clause4.1 (iii) of the PPAs which provides that the RVPN has the right to connect additional load to the interconnection feeder but the same can happen

only after ensuring that it would not adversely affect the interests of the existing users of the same feeder. By allowing connectivity to M/s. Palimarwar RVPN also breached the provisions of RERC (Rajasthan Grid Code) Regulations, 2008.

- 11. Petitioner prayed to declare that evacuation approval grant by RVPN to Pali marwar's solar project, will not impact the evacuation of power from the Petitioner's Wind Projects and direct RVPN to take necessary and immediate steps to strengthen the relevant evacuation system before granting necessary approvals to M/s Pali marwar's solar project.
- 12. Per contra Respondent RVPN and SLDC submitted that present petition has been filed on the assumptions, probabilities, possibilities and apprehensions of the Petitioner. Therefore, petition is liable to be dismissed as premature.
- 13. Respondents contended that grievance or dispute raised by the Petitioner is flowing from the PPA dated 05.02.2015 entered between the Petitioner, M/s. Gamesa Wind Turbines Pvt. Ltd. and JVVNL. RVPN is not a party to the said PPA.
- 14. Respondents submitted that existing wind power plants of capacity of 49.75 MW are connected at 33 kV voltage level at 132 kV Sheo GSS which directly feed the load of Discom connected through the 33 kV feeders of the Discom and after feeding from the load of Discom, the balance power is stepped up through the existing 75 MVA, 132/33 kV transformers of the RVPN.
- 15. Respondent further contended that there is sufficient and enough spare capacity left at the 132/33 kV transformer of 75 MVA which shall allow the Solar Power Plants to be sanctioned at 33 kV voltage of 45 MW. Therefore, even on technical grounds as well as on merits, no case is made out in favor of the Petitioner and is not entitled to any relief as sought for by the Petitioner.

- 16. We observe that total Generating plants connected at 132/33 kV RVPN's Sheo Sub-station is of 49.75 MW capacity at 33kV side which comprises of 40 MW of Wind power plant of the Petitioner whereas 9.75 MW of the Wind power plant sanctioned to others. The Sheo Sub-station presently has a total capacity of 75 MVA (50 MVA + 25 MVA).
- 17. It is also observed that RVPN has granted evacuation approval to a solar power plant of M/s. Palimarwar Solar House Pvt. Ltd. for a capacity of 40 MW to be connected at 33 kV level. Considering this the total power likely to be evacuated at Sheo Sub-station from 33 kV voltage level is around 90 MW whereas Sub-station transformation capacity is 75 MVA. Although it is mentioned by RVPN that Discoms are drawing power from this Sub-station at 33 kV voltage level. As per the data provided by RVPN, it is observed that Discom's drawal at 33 kV level is varying from 1 MW to 38 MW. The possibility of Transmission constraint can't be negated just because of presence of Discom load. The variation in Generation/ Discom load may create a situation of transmission constraint for Generators.
- 18.As per Sec. 39(2)(c) of the Act it is responsibility of STU to develop Transmission system for smooth flow of electricity from Generating stations to load centre. Therefore, RVPN should conduct Load flow studies in this case to analyse the existing Transmission system for smooth flow of electricity from Generating stations and, if need be, should augment the transformation capacity to avoid transmission constraint.
- 19. Accordingly, Commission directs RVPN to take necessary steps to ensure that no curtailment of any Generator connected at 132/33 kV Sheo Substation shall be done on account of Transmission constraint.
- 20. Petition stands disposed of accordingly.

(Prithvi Raj) Member (S. C. Dinkar) Member

(Shreemat Pandey) Chairman