

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 179/MP/2015

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri A.K. Singhal, Member

Shri A.S. Bakshi, Member

Dr. M.K. Iyer, Member

Date of Order : 28th of February, 2017

IN THE MATTER OF:

Petition under Section 79 of the Electricity Act, 2003 read with clause 5.2 of the operating code under the Indian Electricity Grid Code and Regulations 12 and 13 of the Central Electricity Regulatory Commission (Unscheduled Interchange Charges and related matters) Regulations, 2009; Regulations 7(1) and (2), 12, 13 of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 and Regulations 111, 114 and 115 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

AND

IN THE MATTER OF:

1. M/s Jaipur Vidyut Vitaran Nigam Limited
Vidyut Bhawan,
Jaipur-302 005,
Rajasthan

2. M/s Ajmer Vidyut Vitaran Nigam Limited
Hathi Bhata,
City Power House,
Ajmer-305 001,
Rajasthan

3. M/s Jodhpur Vidyut Vitaran Nigam Limited
New Power House,
Industrial Area,
Jodhpur-342 003,
Rajasthan

.....Petitioners

Versus

1. M/s Power System Operation Corporation Limited
B-9 Qutab Institutional Area
Katwaria Sarai,
New Delhi - 110 016
2. M/s Powergrid Corporation of India Limited,
Saudamini, Plot No. 2, Sector 29
Near IFFCO Chowk,
Gurgaon
Haryana-122001
3. State Load Dispatch Centre,
Rajasthan Rajya Vidyut Vitaran Nigam Limited
Jaipur
4. Northern Regional Load Dispatch Centre.
29, Race Course Road,
Bengaluru - 560 009

.....Respondents

Following were present:

Shri M.G.Ramachandran, Advocate for the petitioners
Ms. Anushree Bardhan, Advocate for the petitioners
Shri Sanjeev Bansal, JVVNL
Ms. Supriya Singh, NRLDC

The petitioners, Distribution companies of Rajasthan, have filed the present petition under Section 79 of the Electricity Act, 2003 read with clause 5.2 of the operating code under the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (Grid Code) and Regulations 12 and 13 of the Central Electricity Regulatory Commission (Unscheduled

Interchange Charges and Related matters) Regulations, 2009 (UI Regulations); Regulations 7(1) and (2), 12, 13 of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2014 (Deviation Settlements Regulations) and Regulations 111, 114 and 115 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999. The petitioner has made the following prayers:

“(a) admit the present petition;

(b) direct that the Wind Power Projects and the Solar Power Projects shall also be subject to the scheduling and dispatch mechanism subject to a specified deviation as may be considered appropriate to protect the errors in estimating the generation from such Projects and to give schedule;

(c) waived the application of penal provision in the applicable regulations to the extent of deviations in the Schedule and drawl of power from Wind Power and Solar Power, more particularly in the States like Rajasthan, Gujarat, Tamil Nadu etc which have shown significant development of such Non-Conventional Power Projects of infirm nature consistent with the declared policies of the Central Government, State Government and the Central and State Regulatory Commissions;

(d) relax the frequency norms to 49.7 Hz and 50.2 Hz for the State Utilities when such deviation are caused on account of the injection of power from the Wind Power Projects and Solar Power Projects and not to be penalise the State Utilities for such deviation;

(e) waive the conditions imposed in regard to the maintenance deviation to 150 MW or 12% of the scheduled power on any time block to the Rajasthan State as a whole and to be borne by the Rajasthan State Utilities again when such range is caused on account of the Wind Power and Solar Power into the Grid;”

2. The submissions of the petitioners are as under:

(a) The petitioners procure electricity and undertake the distribution and retail supply of electricity to the public at large. The petitioners entered

into Power Purchase Agreements, amongst others, with the Wind Power Projects and Solar Power Projects in the State of Rajasthan in accordance with the requirements to fulfil the Renewable Purchase Obligation as well as to promote Non-Conventional Energy Projects in the State as per the policies of the Government of Rajasthan.

(b) The Petitioners are obligated to procure Non-Conventional Energy in terms of the provisions of Section 86 (1) (e) of the Act read with the applicable Regulations of the Rajasthan Electricity Regulatory Commission (the State Commission) constituted under the Act. In addition, the Wind Power Projects and the Solar Power Projects can captively use the electricity generated or otherwise supply electricity generated through Open Access. The deviations occurring on account of injection of power by such Wind Power and Solar Power Projects and its effect at the inter-State level is also required to be settled by the Petitioners with Utilities outside the State of Rajasthan. The State Commission of Rajasthan has granted a "Must Run Status" to the Solar Power Projects and Wind Power Projects. Grid Code also provides for such "Must Run Status" to Wind Power and Solar Power Projects.

(c) As of 1st April 2015 878.7 MW of Solar Projects and 3213.82 MW of Wind Projects have been commissioned in the State and are generating and injecting power into the Grid. The power from the Solar Power Projects and Wind Power Projects are being injected without the need to follow the

scheduling and dispatch mechanism which are otherwise applicable for others to maintain grid frequency. The Commission had earlier notified the Regulations providing for scheduling and dispatch mechanism to be adopted for the Wind Power Projects subject to the condition that the Wind Power Projects Developers shall maintain the wind power generation within $\pm 30\%$ from the schedule and in deviation thereof to pay penalty. However, at the instance of the Wind Power Developers, the Commission has suspended the implementation of the above scheme. As on date, the Wind Power Developers are not subjected to any scheduling of the power to be injected by them into the Grid. As a result of the above, the injection of the power from the Wind Power Projects and also the Solar Power Projects have remained unregulated by the scheduling and dispatch mechanism or the Deviation Settlements Regulations which came into force effective from 17.2.2014. Further in terms of Regulation 5.2 (m) of the Grid Code as amended by the Amendment Regulations, 2014 effective from 17.2.2014 whereby the frequency range for operation has been modified from the existing 49.7 Hz - 50.2 Hz to 49.90 Hz - 50.05 Hz. In terms of Regulation 7 (1) and (2) of the Deviation Settlements Regulations, the deviation in injection/drawl shall not exceed 150 MW or 12% of Schedule for each time block.

(d) The following cumulative effect of the above, namely:

(i) not subjecting the Wind Power Projects and Solar Power Projects to scheduling and dispatch mechanism applicable to all others;

(ii) reducing the frequency range for operation to 49.90 Hz - 50.05 Hz; and

(iii) enforcing the requirement on the State Utilities to the deviation in injection/drawal not exceeding 150 MW or 12% of the schedule whichever is lower for each time block,

are serious and cause adverse consequences to the Petitioner in operating and maintaining the distribution system in the State. As a result, significant capacity addition of Wind Power and Solar Power Projects in the recent years and injection of power generated from the said projects into the Grid without being subjected to scheduling and dispatch mechanism, it has not been possible to maintain the requirement of 150 MW or 12% of the schedule by the Petitioners and also operating within a narrow frequency range of 49.90 Hz to 50.05 Hz is being borne by the Rajasthan State Utilities.

(e) The Rajasthan Utilities have been encouraging the injection of wind power into the grid. However, on the narrowing down of the frequency band to 49.7 Hz to 50.2 Hz and restricting the deviation of not more than 12% or 150 MW whichever is lower, it has become impossible on the part of the Rajasthan utilities to accept all the wind power in the State. The provisions of Deviation Settlements Regulations, for the over-drawl and under-injection as

well as over- injection and under-drawl, cast an obligation on the Host States to pay. Due to variation in generation from renewable sources like wind and solar, there could be variation in excess of the set limits in both injection and drawl which may attract deviation charges. Therefore, deviation charges as mentioned above arising out of variation in wind energy/solar energy being Renewable Energy Sources should be exempted from the purview of the said Regulations and a suitable mechanism is to be devised to neutralise any financial implication to the Host State on account of under or over-injection due to variation in wind/solar generation compared to the schedule.

3. The petitioners have submitted that, in view of the above, it is necessary for the Commission to immediately implement the Regulation requiring the Wind Power Projects and also provide for the Solar Power Projects to comply with the scheduling and dispatch mechanism for injection of power into the Grid with an appropriate deviation range i.e. $\pm 30\%$ as envisaged earlier for Wind Power Projects. In addition to the above, it is also necessary for the Commission to relax the frequency range from 49.90 Hz to 50.05 Hz to the earlier range of 49.70 Hz to 50.2 Hz in so far as the injection of wind power and solar power projects are concerned and also further waive the requirement of 150 MW or 12% of the scheduled power in so far as the deviation is on account of the injection of the power again limited to the Wind Power Projects and Solar Power Projects.

4. The matter was heard on 15.9.2015. The Commission after hearing the parties observed that the Indian Grid is the third largest Grid in the world with very lenient norms and a Committee has already been constituted for the revision of the norms. Learned counsel for the petitioners requested to allow the petitioners to participate in the proceedings of the Committee which was acceded to and the case was adjourned.

Analysis and Decision

5. We have considered the submissions of the parties. The petitioner's prayers are primarily on two counts viz., (i) Mandating the requirement of Forecasting and Scheduling for the Wind and Solar generators in the State of Rajasthan, and (ii) Relaxation of the operating frequency band and the deviation limit (of 150 MW or 12% of schedule whichever is lower) as provided in the Grid Code and Deviation Settlements Regulations. It may be noted that both these issues have already been addressed by the Commission through amendments in the relevant Regulations. The framework for forecasting and scheduling of Wind and Solar generation has already been put in place where it has been made mandatory for regional entity Wind and Solar generators to undertake forecasting and provide schedule. The amendments viz., the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (Second Amendment) Regulations 2015 and Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Third Amendment) Regulations, 2015 have also provided for a tolerance limit for deviation by such wind and solar generators, beyond

which they are liable to pay deviation charge as provided in the said amendment Regulations. Model Regulations for States on the above lines have also been evolved and endorsed by the Forum of Regulators and the State Commissions have initiated action for implementation of the framework of forecasting and scheduling at the State level.

6. Further, the issues raised by various stakeholders seeking relaxation of deviation limit (of 150 MW or 12% of schedule whichever is lower) have also been considered by the Commission and the Commission through the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (Third Amendment) Regulations, 2016 has already provided for separate deviation limit for renewable rich States. The revised deviation limit for States having combined installed capacity of Wind and Solar projects in the range of 1000 - 3000 MW, has been fixed at 200 MW and that for States with combined installed capacity of Wind and Solar projects more than 3000 MW has been fixed as 250 MW.

7. The petition is therefore, rendered infructuous and stands disposed of accordingly.

Sd/-
(Dr. M.K.Iyer)
Member

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B.Pradhan)
Chairperson