



ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

Vidyut Niyantrana Bhavan, Dinnevarapadu Road, Kurnool - 518 002, Andhra Pradesh

TUESDAY, THE TWENTIETH DAY OF AUGUST,
TWO THOUSAND AND TWENTY-FOUR

:Present:

Justice C.V. Nagarjuna Reddy, Chairman

Sri Thakur Rama Singh, Member

Sri P.V.R.Reddy, Member

OP No.21 of 2020

Between

Tata Power Renewable Energy Limited

... Petitioner

and

1. Southern Power Distribution Company of Andhra Pradesh Ltd.
 2. Andhra Pradesh State Load Despatch Centre,
 3. Transmission Corporation of Andhra Pradesh
- ... Respondents

This Original Petition has come up for final hearing before us on 30-12-2023, in the presence of Sri Sanjay Sen, learned Senior Counsel representing Mr Shri Venkatesh, learned counsel for the Petitioner; and Sri P.Shiva Rao, learned Standing Counsel for the Respondents; that after hearing the learned counsel for both the parties and on consideration of the entire material on record, the Commission passed the following:

ORDER

Tata Power Renewable Energy Limited (for short “the Petitioner”) has filed this petition under Under Section 86(1)(e) and (f) of the Electricity Act, 2003 (for short “the Act”) seeking a direction to the Respondents to treat the loss of generation of Rs.68.39 crores computed till May 2020 - on account of curtailment of power due to inadequacy of the Transmission System, i.e. Uravakonda Grid Sub-Station (“Uravakonda GSS”) and the consequential rampant backing down instructions given to it, frequently, by the Respondents - as Deemed Generation by the Petitioner; and to direct Respondent No.3-APTRANSCO/Respondent-1 APSPDCL to make payment of the Deemed Generation Charges for the aforesaid Deemed Generation of power.

The case of the Petitioner, in brief, is as follows:

- a) The Petitioner, a subsidiary Company of Tata Power Company Limited (“TPCL”), owns and operates the 100 MW Nimbagallu Wind Power Plant, situated at Honnura-Palturu, Anantapur District, Andhra Pradesh; that the New and Renewable Energy Department Corporation of Andhra Pradesh Limited (“NREDCAP”) has accorded approval to the said Project, vide: Proceeding No.NREDCAP/WE/GWTPL/10508/2013, dated 30.10.2013 and Proceeding No.REDCAP/WE/GWTPL/10508/2016, dated 22.09.2016; that the Project was commissioned in two phases - viz., first 20 Nos. x 2.00 MW = 40 MW was commissioned on 27-12-2016, and 30 Nos. x 2.0 MW = 60 MW was commissioned on 21-3-2017 - with associated electrical equipment interconnecting the Wind Farm with the Grid of APTRANSCO-Respondent No.3 through 220/33 KV pooling substation; and that Respondent No.1-APSPDCL has issued Commissioning Certificates on 06-1-2017 and 30-3-2017, respectively.

- b) On 26.03.2016, this Commission, based on the APREC (Terms and Conditions for Tariff Determination for Wind Power Projects) Regulations, 2015, dated 31.07.2015 (Regulation No.1/2015), passed Wind Tariff order in O.P. No.13 of 2016 determining tariff of Rs.4.84 ps for the Projects coming into generation between the period 01.04.2016 to 31.03.2017. The relevant extract of the said Tariff Order reads as under:

Sl.No.	Parameter	Value
1	Tariff Period	25 years
2	Useful Life	25 years
3	Capital Cost	600.9 lakhs/MW Including evacuation cost
4	O & M Expenses	Rs.9.06 lakhs
5	O & M Expenses Escalation	5.72% pa.
6	Depreciation for the First 10 years	7% pa.
7	Depreciation for the remaining useful life of the plant	1.33% pa.
8	Capacity Utilization Factor	23.5%
9	Return on Equity	16%
10	Interest cost on Debt	12.76%
11	Tenure of Loan	10 years
12	Interest on working capital	13.26%
13	Debt Equity Ratio	70:30
14	Discount Rate	10.64

Based on the above parameters and considering the useful life of the Wind power Plant as 25 years, the levelized generic preferential tariff works out to 4.84 ps per unit without considering the Accelerated Depreciation and Rs.4.25 per unit with Accelerated Depreciation as tabulated below:

Tariff without AD Benefit	Tariff with AD Benefit
4.84	4.25

- c) On 31.10.2016 a Power Purchase Agreement (PPA) was executed between the Petitioner and APSPDCL-Respondent No.1 in respect of the said Power Plant, in conformity with the aforesaid Wind Tariff Order dated 26.03.2016 and Regulation 1 of 2015 of this Commission, with a proposal of 0.50 MW for Auxiliary Consumption and 99.50 MW for export to the Grid for sale to Respondent No.1; that, accordingly, the said Power Plant was connected to the 400/220 kV Uravakonda GSS through 220/33 kV pooling substation at Nimbagallu. The said PPA is valid for a period of 25 years from the Commercial Operation Date (COD).
- d) Under Section 39 of the Act, Respondents 2 and 3 (APSLDC and APTRANSCO) are statutorily mandated to provide an efficient, coordinated and economical system for intra-state transmission lines for smooth flow of electricity from the generating stations to the load centres, but they miserably failed to do so.
- e) While so, on 03-6-2017, Respondent No.2 issued directions to all the Wind Power Generators that are connected with 400 KV Uravakonda GSS that the power evacuation for each IPP connected to the said Grid would be restricted to 67% due to the evacuation capacity available, and, accordingly, the Project of the Petitioner was restricted to evacuate only 67 MW out of the total installed

capacity of 100 MW, which was subsequently revised to 72.93% vide: letter dated 21-11-2017 issued by Respondent No.1.

- f) On 23-5-2018, a meeting was held by Respondent No.2 with various Wind Power Generators, with cumulative installed capacity of 1755.2 MW, which are connected with 400 KV Uravakonda GSS, wherein it was concluded that Respondent No.3 will explore the construction of 220 KV Borampalli-Kalyandurg in order to increase the evacuation capacity; and the Wind Power Generators were permitted to evacuate up to 90% of Transformers capacity and any generation in excess thereof will be curtailed. Subsequently, various letters have been issued by Respondent No.3 from 20-7-2018 to 14-5-2019, revising the curtailment instructions.
- g) As there was a substantial increase in the curtailment of power from renewable sources, on 26-6-2019, a Review meeting of the Energy Department, chaired by the Chief Minister of the State of A.P, was convened, and Minutes were issued on 01-7-2019, *inter alia*, directing to challenge the Regulation of this Commission regarding the “Must Run obligation” in the Wind and Solar projects and to file a petition before this Commission to reduce and refix the wind Feed in Tariff (FiT) after considering the Must Run and other incentives. Accordingly, the Energy Department, Government of Andhra Pradesh issued orders on 01-7-2019 constituting the HLNC to “review, negotiate, and bring down the high wind and solar energy purchase prices”. On 12-7-2019, Respondent No.1 issued letters to various Wind Energy Generators directing them to reduce the tariff to Rs.2.43 ps., per unit and to submit the revised monthly power supply bills while making it clear that if they do not accede to the said direction, Respondent No.1 would have no option but to terminate the PPAs. The aforesaid letters dated 01-7-2019 and 12-7-2019 were challenged before the Honourable High Court and the High Court vide order dated 25-7-2017 in WP (c) No.9844 of 2019 and batch, stayed the operation of the said letters. Subsequent to the passing of the aforesaid order by the

Honourable High Court, there was a phenomenal increase in the curtailment instructions. Aggrieved by the same, some of the Wind Generators filed Interlocutory Applications before the Honourable High Court and the High Court, vide order dated 01-8-2019, *inter alia*, directed Respondents 1 and 2 herein to discharge the statutory functions fairly and refrain from arbitrary curtailment of power generation by the power generating projects and display the written justification for curtailment of power on the website of Respondent No.3 on weekly basis as required under Point 4.3.8.1 of Grid Code, pending further orders.

- h) Even subsequent thereto, Respondents 2 and 3 continued to curtail power, alleging that there was tripping of 500 MVA ICTs-3 and 4 at Uravakonda GSS. On 27-8-2019, the Wind Independent Power Producers Association (WIPPA), of which the Petitioner is a member, addressed letters to Respondent No.3 for early resolution of the issue, for which Respondent No.3 sent a reply, *inter alia*, stating that efforts are being made to restore both ICTs, but no steps have been taken. The WIPPA also filed a petition before this Commission, *inter alia*, seeking a direction to Respondents 2 and 3 to restore the Uravakonda substation and allow evacuation of the entire generation capacity connected through the said station and abstain them from taking actions, including removal of any of the ICT from the said substation. Meanwhile, Respondent No.3 has continued to issue curtailment instructions.
- i) The Petitioner addressed separate letters on 26-10-2019, 18-11-2019, 3-1-2020 and 8-6-2020 to Respondent No.2, *inter alia*, stating that due to the curtailment instructions issued, it has suffered a generation loss 128.10 MU for the period from April, 2017 to May, 2020, which corresponds to a revenue loss of Rs.68.40 crores.
- j) The Petitioner alleged that due to insufficient evacuation capacity of the Grid at the Uravakonda GSS, the Wind Power Plant of the Petitioner has continuously been running on curtailed power mode

as per the instructions issued by APTRANSCO-Respondent No.3 and APSLDC-Respondent No.2; that the restriction of load curtailment usually varies from 0% to 100%; that the above curtailed operation of the said plant led to massive under recovery for the Petitioner and the premise upon which the Tariff of the Petitioner's project was determined is completely getting dislodged; that Respondent Nos. 2 and 3 are statutorily obligated to ensure smooth transmission of power for all generating companies, including the Petitioner under Section 39 of the Act, but failure of Respondents 2 and 3 to act, in terms of the statutory mandate, has resulted into tremendous financial loss for the Petitioner; that the Petitioner has repeatedly informed Respondents 2 and 3 that there has been a considerable loss in generation of approximately 128.10 MUs till May 2020, which, in turn, has resulted in a cumulative revenue loss of approximately INR 68.40 Crores; that the attempts of the Petitioner to amicably resolve the issue of curtailment - which has been primarily caused on account of lack of evacuation facilities with Respondent No.2 - have failed; that on 08.6.2020 the Petitioner sent a letter to Respondent No.1 specifically requesting for payment of compensation for loss of revenue in terms of Article 9.2 of the PPA, but no resolution has been arrived at till date. The Petitioner has furnished the details of the curtailment and the estimated loss of Revenue in a tabular form from the date of commissioning of its project, which reads as under:

Month/year	Estimated Loss of Generation due to backing down (MUS)	Estimated loss of Revenue (Rs. Cr)
Apr-2017	0.113	0.060
May,17	1.138	0.608
June-17	4.472	2.388
July-17	8.101	4.326
August-17	1.795	0.959

Month/year	Estimated Loss of Generation due to backing down (MUS)	Estimated loss of Revenue (Rs. Cr)
September-17	0.476	0.254
October-17	0.057	0.031
November-17	0.000	0.000
December-17	0.077	0.041
January-2018	0.244	0.130
February-18	0.513	0.274
March-18	0.011	0.006
Total FY 2017-18	16.997	9.077
Apr-2018	0.100	0.053
May,18	0.210	0.122
June-18	3.110	1.661
July-18	5.350	2.857
August-18	4.530	2.419
September-18	0.050	0.027
October-18	0.010	0.005
November-18	0.030	0.016
December-18	0.020	0.011
January-2019	0.610	0.326
February-19	0.894	0.477
March-19	0.750	0.401
Total FY 2018-19	15.664	8.364
Apr-2019	1.411	0.753
May,19	4.127	2.204
June-19	5.361	2.863
July-19	13.531	7.225

Month/year	Estimated Loss of Generation due to backing down (MUS)	Estimated loss of Revenue (Rs. Cr)
August-19	12.034	6.426
September-19	14.970	7.994
October-19	4.300	2.296
November-19	1.720	0.918
December-19	13.720	7.326
January-2020	12.210	6.520
February-20	5.300	2.830
March-20	0.748	0.399
Total FY 2019-20	89.431	47.756
Apr-2020	1,481	0.791
May-2020	4.500	2.403
Total FY 2020-21	5.981	3.194
Grand total	128.07	68.39 crores

Hence, the Petitioner filed the present petition for the aforementioned reliefs.

On 10-12-2020, Respondent No.2-APSLDC filed a counter affidavit denying the allegations in the petition. It is, *inter alia*, stated therein that -

- a) the present Petition is not maintainable for the reason that neither the PPA nor the Regulations contemplate payment of such compensation; that Respondent No.2 has to operate the Grid in compliance with the Indian Electricity Grid Code (IEGC) and Andhra Pradesh Code of Technical Interface (APCTI) read with the provisions of the Electricity Act; that the allegation of the Petitioner that it has been running its Plant on Curtailed Power Mode on the instructions given by Respondent No.3 due to insufficient

evacuation capacity of Uravakonda GSS is far from truth, baseless and factually incorrect and hence denied; that the claim of the Petitioner for recovery of compensation due to insufficient evacuation facility at Uravakonda Substation is denied since Article 6(2)(i) of the PPA does not contemplate payment of any compensation in the event of non-providing of evacuation facility and the DISCOMs are only obligated to put reasonable efforts in arranging evacuation facility; that the Respondents have discharged their obligation; that the Petitioner has mixed up other categories of backdown with the backing down which arose due to insufficient evacuation in the claim and claimed imaginary quantity of energy; that the claim of the Petitioner for compensation for under recovery of tariff is due to default in arranging sufficient evacuation facility at Uravakonda Substation; that the construction of evacuation facility by Respondent No.3 was delayed due to Right of Way (RoW) issues and other hurdles caused by the landowners, political parties, poor turnout of work by the earlier contractor and change of the Contractor etc., but, however, it could complete the construction of evacuation system at Uravakonda Substation, even belatedly, with the help of Police and Revenue Officials; that nowhere in the PPA it is stated about the Deemed Generation or compensation for under recovery of tariff for want of required evacuation facility nor is there any statutory provision to fasten the liability of compensation for not providing sufficient evacuation facility, and, hence, the claim of the Petitioner for compensation on the said aspect is not as per law and not maintainable;

- b) It is averred that in the real-time operation of the Grid, curtailment is necessitated due to (a) non-completion of lines, (b) forced outage of Inter Connecting Transformer (ICT), and (iii) Grid security, that the curtailment instructions have been issued to all the Wind Developers connected to 440 KV Uravakonda GSS because of limitation of transformation capacity and non-completion of 220

KV Kalyandurg-Borampalli Transmission line in time; and that in the meeting held on 23-5-2018 all the Wind Developers, including the Petitioner, have agreed for curtailment of their generation due to transmission constraint cropped up, which has been admitted by the Petitioner in paras 10.11 and 10.12(c) of the petition, and, hence, the claim of the Petitioner is self-contradicting and not maintainable.

- c) It is further averred that the 500 MVA Transformers at Uravakonda 400 KV GSS were tripped on 17-8-2019 & 27-8-2019, which took long time to rectify and bring them back to service; that due to the tripping of the Transformers, which is a Forced outage and was not in the control of the Respondents, curtailment instructions were issued to all the Wind Generators connected to the Uravakonda Grid in proportion to their capacities limiting to transformation capacity so as to evacuate the generation to the extent possible, from time to time; that initially four 315 MVA Transformers were proposed to be installed at the Grid, but later the CEA has revised the same to two 315 MVA and two 500 MVA Transformers capacity; that since procurement and erection of the 500 MVA transformers is a long time taking process, on 12-10-2017 Respondent No.3 has diverted one 500 MVA and one 315 MVA Transformers from its other sites to Uravakonda 400 KV GSS to evacuate the power to the maximum extent possible; that the Respondents have taken all efforts to evacuate the available wind energy at Uravakonda and there is no breach of contract on their part; that as per Article 2 of the PPA all the delivered energy, at the interconnection point for sale to DISCOM will be purchased at the tariff provided under Article 2.2 @ Rs.4.84 ps per unit, but not for the generation loss due to Forced outage, and, hence, the claim for Deemed Generation is denied.
- d) It is further averred that Back Down (ramp down)/ramp up of generation instructions were issued only when there is a deviation in the demand and generation, in real time operation, depending

on the prevailing Grid conditions, in compliance of all the Statutory Regulations in force, viz., IEGC and APCTI; that Wind and Solar generations were backed down, after backing down the conventional units, to the technical minimum extent possible in the time available; that, however, in certain crucial situations, like changeover, weather changes, huge variation in Renewable Energy etc., Wind power curtailment may happen even prior to conventional generation backing down because of gate closure of seven time blocks for effecting the revision in the Schedules of Central Generating Stations (CGS) as per CERC Regulations, and, as such, backing down instructions given by Respondent No.1 are having absolute justification from the real time operation prospective; that around 7600 MW of Wind and Solar Generation (RE) plants having Must Run status are integrated to the Andhra Pradesh Grid and the Must Run status is subjects to Grid Security; that as per Clause 5.2(U) of the IEGC, Respondent No.1 may instruct the Wind Generators to back down generation on consideration of Grid Security; that Grid Security Curtailment Instructions were uploaded on the website of Respondent No.3 from August, 2019 to May, 2020 in compliance with the directions of the Honourable High Court, vide: order dated 24-9-2019 in Writ Petition No.9844 of 2019 and batch, that the curtailment instructions given, on consideration of Grid Security, does not come under insufficient evacuation capacity; that the Petitioner has mixed up the issue of evacuation constraint in the transmission system with the curtailment instructions issued by Respondent No.2 under Clauses 5.2(m), 5.4.2(a) and 6.4.7 of the IEGC for maintaining Grid Security and wants to get benefit out of the same; and that, therefore, the claim of the Petitioner for compensation is contrary to law and the contractual terms.

- e) It is further averred that there were no transmission constraints in April and May 2017, and the generation of the Petitioner was fully evacuated and, hence, the claim of generation loss during these

months is factually incorrect; that as and when the Petitioner's generation availability is beyond the evacuation limit, the Petitioner has not curtailed the generation and dispatched the entire generation, which is reflected in the Pooling Station Meter Data (filed as Annexure-R8 to the counter); that the Meter Data shows that the Petitioner's generation was more than 67% for 285 blocks in June 2017 and 354 blocks in July 2017; that the Petitioner has injected more than the allowed quantum in almost all the months during the relevant period, but could not reach even 70 MW generation during the said months, and, hence, the claim of the Petitioner for the alleged Generation Loss is incorrect and contrary to the facts on record. Hence, prayed for the dismissal of the petition.

On 23-7-2021, the Petitioner, while reiterating the contents in the petition, filed a rejoinder reiterating rebutting the averments in the counter-affidavit. It is, *inter alia*, stated therein that:

- (a) Under Section 32(2) of the Act it is obligatory on the part of Respondent No.2 to ensure that scheduling of the power is in terms of the contract signed between the parties; that the Petitioner's contract shows that it has Must Run status, but Respondent No.2 has rampantly backed down the Petitioner for economic considerations; that under Section 34 of the Act Respondent No.3 shall comply with the technical standards and maintain transmission lines; that under Section 39(2)(c) Respondent No.2 shall develop an efficient, coordinated and economical system for intrastate transmission lines for smooth flow of electricity from a generating station to the load centres, but, it has granted connectivity to the Projects totalling 1844 MW from the Uravakonda GSS, which otherwise has the capacity of only 1630 MW, and, thereby created a bottleneck of generation for all RE generators, including the Petitioner; that Respondent No.3 failed to maintain the efficient, coordinated and economical system at Uravakonda GSS for evacuation of electricity, which is in

complete violation of the mandate under Section 40(a) of the Act; that Respondent No.2 itself admitted in its counter-affidavit that the existing infrastructure made available for the Petitioner was inadequate for evacuation of 100% available capacity; that Clause 6.6 of the Andhra Pradesh Electricity Regulatory Commission (Transmission Standards of Performance) Regulation, 2007 provides that in the event of non-compliance with the Standards specified by this Commission, the User of the System is liable to receive compensation; that the aforesaid Clause is in conformity with the mandate of Section 57(2) of the Act, which also provides that in case a Licensee fails to meet the Standards prescribed by the State Commission, then such a Licensee is liable to pay compensation to the affected person; that as per the Scheme of the Act as well as the said Regulation, Respondent No.2 is liable to compensate the Petitioner for its failure to maintain an adequate transmission system to evacuate power from the plant of the Petitioner; and that the contention of Respondent No.2 that, despite their failure to ensure evacuation, no compensation can be levied upon them runs contrary to the ethos of Section 57(2) of the Act.

- (b) It is further averred that the Ministry of Power, Government of India repeatedly issued directions in terms of Section 37 of the Act and emphasised that RE Power is a “Must Run”, meaning thereby that it ought not to be curtailed for any economic reason, but Respondent No.2 has not paid any heed to such instructions and issued the curtailment instructions, which is contrary to the Promotion of RE Energy/mandate of the Act; and that the MNRE Guidelines, in unequivocal terms, provide that in the case of curtailment of the RE Projects, they are entitled to receive payment in the form of Deemed Generation Charges.
- (c) It is further averred that as per Article 9.2 of the PPA, the Respondents are obligated to compensate the Petitioner for the loss of generation and loss of revenue on account of their failure to

provide adequate evacuation of power as well as compensation for loss or damage caused by breach of contract under Section 73 of the Contract Act, 1872. In support of the aforesaid pleadings, the learned counsel for the Petitioner relied upon the decision of the **Hon'ble Delhi High Court in Simplex Concrete Piles (India) Ltd Vs Union of India¹, MTNL Vs. Tata Communication Ltd²**, and the order of the **Honourable APTEL in Uttar Haryana Bijli Vitran Nigam Limited and another Vs. Haryana Electricity Regulatory Commission and others³**.

- (d) It is further averred that Respondent No.2 has not given any explanation - (i) for connecting/approving higher capacities (1840 MW) against the available ICTs of 1260 MW at Uravakonda GSS, (ii) as to what measures were taken to provide 100% evacuation prior to commissioning of the project, i.e., 30-3-2017) and (iii) the timelines for providing 100% evacuation of power from the project; that the action of Respondents 2 and 3, in not permitting the Petitioner to evacuate the entire capacity so as to sustain its operation, is in complete violation of the mandates prescribed under the Act, Wind Power Policy and Wind RE Regulations, which infringe the doctrine of "legitimate expectation" of the Petitioner to get lawful and reasonable return. In support of this plea, the Petitioner relied upon the decision of the Hon'ble Supreme Court in the State of West Bengal Vs. Shivananda Pathak⁴.
- (e) It is further averred that the delay in construction of the Borampalli-Kalyandurg line is not relevant to the case of the Petitioner as the Petitioner's evacuation was never contingent upon the Borampalli-Kalyandurg line and as Respondents 2 and 3 have added various generators, who are part of Borampalli-Kalyandurg scheme, upon Uravakonda GSS, the overall evacuation of the Petitioner was severely impaired; and that the reliance placed by

¹) 2010 SCC Online Delhi 821

²) (2019) 5 SCC 341.

³) Judgement dated 10-4-2012 in Appeal No.165 of 2011.

⁴) (1998) 5 SCC 513

Respondent No.2 on Annexures R1.R.7 in this regard is of no consequence.

- (f) As regards the “curtailment due to Grid Security” pleaded by Respondent No.2, the Petitioner avers that the Respondents have filed no material that the issue of Grid Security was involved during the period in question; that this Commission in the Retail Tariff Order dated 10-2-2020 has observed that “there has been no report showing Grid instability Security problems during the last two years on despatch of variable renewable energy”; and that the Respondents have indulged in deliberate curtailment of power from the Petitioner for commercial reasons.
- (g) That, as per the data submitted, the Petitioner was being curtailed to over 96%, whereas the evacuation from the Thermal Power Plants was in the range of 70-100%, which is in clear violation of the “Must Run Status” granted to RE Generators, such as the Petitioner; that while curtailing the power from the Petitioner’s unit, Respondents are purchasing cheaper power from the Power Exchange at an average cost of Rs.2.20 ps; and that when the Respondents curtail RE generation, they shall ensure that loss is caused to such RE Projects, which have a single part tariff in their PPAs and are not compensated in case of backing down; and that the contentions raised by Respondent No.2 are wholly without merit and are liable to be rejected.

On 13-4-2022, during the hearing, when this Commission indicated that since it is the obligation of Respondent No.3 under the Scheme to ensure that it creates an efficient and economical transmission system, and non-compliance thereof, in law, entitles the Petitioner to claim compensation from Respondent No.3, the Petitioner proposed to amend the prayer in the OP. Accordingly, on 21-5-2022, the Petitioner filed IA No.1 of 2022 seeking amendment of the prayer in the OP so as to make a claim against Respondent No.3/Respondent No 1 instead of Respondent No.1, as originally claimed, and the same was

allowed on 20-7-2022 and Respondent No.3 was permitted to file an additional counter, if any.

Along with the aforesaid amendment application, the Petitioner has also filed the relevant Data pertaining to potential generation, the verbal curtailment instructions and the resultant actual generation of the plant for the FY 20-17-18, 2018-19, 2019-20 and 2020-21.

On 12-10-2022 Respondent No.3-APTRANSCO filed an additional counter, along with certain documents, reiterating the averments in the counter-affidavit filed by Respondent No.2, *inter alia*, stating that the claims of the Petitioner are not maintainable as they are neither contemplated in the PPA nor in the Regulations, and, in the absence of statutory liability, the relief sought for in the Petitioner is not sustainable; and that the claim of the Petitioner for damages of Rs.68.39 crores for loss of generation under Section 73 of the Indian Contract Act is not acceptable since no contractual obligations have arisen between the parties.

We have heard both sides. The learned counsel for the Petitioner and Respondents have filed written submissions reiterating their stand in their respective pleadings.

Commission's Analysis

Having regard to the respective pleadings of the parties, the points that emerge for adjudication are whether the Respondents have failed in their statutory duty in evacuating the power from the Petitioner's wind power plant and if so, what is the financial loss caused to the Petitioner on account of the same.

The Petitioner alleged that due to insufficient evacuation capacity of the Grid at the Uravakonda GSS, his Wind Power Plant has continuously been running on curtailed power mode as per the instructions issued by APTRANSCO-Respondent No.3. As per the Data

provided in the Petition, the Commission has estimated the percentage curtailment of energy against his installed capacity of the wind power plant of 100 MW at 23.5 CUF as against the actual CUF furnished in the Petition, as shown in the table below.

FY	Loss of Generation due to insufficient evacuation projected by the Petitioner (MU)	In Percentage terms at CUF 23.5	Actual CUF
Total FY 2017-18	16.997	8.26	20.68
Total FY 2018-19	15.664	7.61	23.88
Total FY 2019-20	89.431	43.44	18.76
Total FY 2020-21(Only two months)	5.981	17.67	

As seen from the above, the alleged energy curtailment is significant from FY 2019-20. As per the chronology of events submitted in the Petition, this can be majorly attributed to the trippings of 500 MVA ICT4 and 500 MVA ICT3 on 17.08.2019 and 27.08.2019, respectively. The ICT4 was restored on 24.10.2019, and the same was tripped again on 10.02.2020. It was restored on 13.02.2020. The ICT 3 was taken to the Toshiba factory in Hyderabad for inspection on 23.09.2019, and it was brought back and put into service only on 28.05.2020. Further, as per the chronology of the events, the 220 kV Borrapalli-kalyandurg line was commissioned on 18.07.2020, and the Petitioner's 100 per cent plant capacity was despatched from 16.11.2020.

The Petitioner's actual CUF is more than the CUF of 23.5 specified in the wind generic tariff Order during FY2018-19. The curtailment of power on account of the tripping of ICT 4 & ICT 3 and remedial measures to restore normalcy were dealt with by the Commission in the daily Orders dated 11.09.2019 & 05.10.2019 and followed by an order

of one of the Hon'ble Members on 19.10.2019 in OP No 54 of 2019 which was filed by the Wind Independent Power Producers Association (WIPPA). In its Order dated 14.07.2020, the Commission has disposed of OP No 54 of 2019. The Order on 14.07.2020 gives the Petitioner (WIPPA) the liberty to approach this Commission if they face any difficulties in the evacuation of power on the Borampalli-Kalyandurg line.

The transformation capacity and total wind installed capacity connected at Uravakonda 400 KV SS at different times, as indicated in the Petition, are shown below.

Date	Power Transformer's transformation capacity at Uravakonda 400kV SS	Total Installed Wind Power Capacity connected at 400kV SS
30.06.2017	1130 MW	1022 MW
12.10.2017	1445 MW	1593 MW
24.05.2018	1445 MW	1755 MW
From 10.05.2019	1630 MW	

As per the Petitioner's submissions, the Petitioner's 100 MW wind plant was commissioned on 21.03.2017. From the above, it is explicit that by the time the total capacity of the Petitioner's wind plant was commissioned, the transformer capacity at Uravakonda 400 kV SS was more than the wind power capacity connected. It is also evident that the connectivity at Uravakonda 400 kV SS is not only for the Petitioner's wind plant, but other wind plants were also connected to the same Station. However, since 12.10.2017, the power transformer's capacity has been less than the total wind capacity connected. The Petitioner is banking upon this fact, terming the same as a failure of the Respondents as per the law.

On Respondent 1's alleged failure, the Petitioner relied on the PPA clauses 1.5.1.10, 3.1, 6.2, 9.2, and 9.3, which are extracted herein.

“1.5 Delivered Energy: means, with respect to any Billing Month, the kilowatt hours (kWh) of electrical energy generated by the Project and delivered to the DISCOM at the Interconnection Point as defined in Article 1.10, as measured by the common energy meter at the Interconnection Point during that Billing Month.

As indicated in the preamble, the delivered energy recorded by the common meter shall be sum of energy delivered by all Wind power projects connected to the Pooling Substation.

Explanation 1: For the purpose of clarification, Delivered Energy, excludes all energy consumed in the Project, by the main plant and equipment, lighting and other loads of the Project from the energy generated and as recorded by energy meter at Interconnection Point.....

1.10 Interconnection Point: *means the line isolator on outgoing feeder on HV side of the pooling sub-station i.e., the sub-station at project site of wind farm which consists of step-up transformer(s) and associated switchgear and to the LV side of which, multiple generating unit(s) ie., wind turbine generators are connected.*

3.1 Upon receipt of a requisition from the Wind Power Producer, the APTRANSCO and DISCOM will prepare an estimate for arranging interconnection facilities for power evacuation at the voltage level as per Article 1.20. The Wind Power Producer have to bear the entire cost of the interconnection facilities as per the sanctioned estimate. The APTRANSCO and DISCOM shall evaluate, design, and install the Interconnection Facilities and perform all work, at the Wind Power Producer's expense, necessary to economically, reliably and safely connect the grid system to the Project switch yard.

6.2 The DISCOM agrees:

(i) to make all reasonable efforts for making a rrangements for evacuation of power from the project to be completed prior to the Commercial Operation Date of the Project subject to Article 3.

(ii) for purchase of Delivered Energy from the project as per section 2.2.

(iii) to co-ordinate with APTRANSCO and assist the Wind Power Producer in obtaining approval for the interconnection facilities where the interconnection is at 132 kV or above voltages, for synchronization, Commercial Operation, regular operation etc., as required by the Wind Power Producer.

9.2 In the event DISCOM commits a breach or any or the terms of this Agreement, the Wind Power Producer shall be entitled to specific performance or this Agreement or claim such damages as would be available under Law or both, at its option, by giving 30 days notice to DISCOM. ”

The Petitioner stated that the perpetual non-availability of the evacuation system leads to a loss of revenue for the generator, thereby affecting the project's viability. That by not evacuating power from the Project, the Respondents have committed a clear breach of the terms of the PPA and the MoU. It stated that under Article 9.2 of the PPA, Respondent 1 is liable to compensate him in case of a breach of the terms of the PPA. The Petitioner's further case is that the situation attracts Section 73 of the Indian Contract Act, 1872, which provides for compensation to a party for loss or damage suffered on account of breach of contract by other party. In this regard, the petitioner placed reliance on the Hon'ble Supreme Court's Judgement in MTNL vs. Tata Communications Ltd.

The Respondents vehemently denied the above averments and stated that there was no breach of contract.

The other relevant clauses of the PPA are also extracted herein to provide a comprehensive understanding of Respondent 1's responsibility as per the PPA.

“1.15 Pooling or Receiving Substation: means 220/33 KV SS constructed, owned and maintained by the Wind Power Producer at Honnura - Palturu in Anantapuram District for the sole purpose

of evacuating energy generated by the Project to the Grid System and for facilitating interconnection between the transmission lines emanating from the Project and the Grid System. As indicated in the Preamble, the Pooling Substation will be common for all Wind power projects connected to the Pooling Substation.”

1.20 Voltage of Delivery

.....

This Project will generate electrical energy at 690 Volts, which will be stepped up to 33 KV at Project's switchyard. The electrical energy will be further stepped up from 33 KV to 220 KV at Pooling Substation and delivered to the grid. (And to connect radially to 400/220 KV Uravakonda Substation)”

On perusal of the different clauses of PPA supra, it is clear that the interconnection point is the line isolator on the outgoing feeder on the HT side of the pooling sub-station situated at Honnura-Palturu and the radial line at 220 kV from the pooling substation to be connected to the 400 kV SS at Uravakonda. On completion of these facilities, the Petitioner declared COD. After the declaration of COD, the Petitioner's alleged generation loss was due to the power transformer capacity issue at Uravakonda 400 kV SS, owned and operated by Respondent 3, which is not a party to the PPA. There appears to be no problem with the evacuation facilities; Respondent 1 has fulfilled its commitment as per PPA. Hence, the Commission is of the view that there is no breach of PPA by Respondent No. 1.

On the alleged failure of Respondent 2, the Petitioner stated that the State Load Despatch Centre - Respondent no 2 shall be responsible for optimum scheduling and despatch of electricity within a State, in accordance with the contracts entered into with the licensees or the generating companies operating in that State under section 32 (2) (a) of the Electricity Act, 2003. That Respondent No.2 failed in its duty, and the Petitioner invoked

Section 33 (4) in this regard. That the Respondent No.2 acted in violation of the Central Electricity Regulatory Authority (Indian Electricity Grid Code) Regulations 2010 ("IEGC"), the Andhra Pradesh Electricity Grid Code ("AP Grid Code"), as well as Regulation 9 of the APERC Wind Tariff Regulations, 2015 which provides that APSLDC is bound to curtail other sources of power before curtailing wind energy, in view of the 'must-run status granted to it, and it failed to follow the Must Run Despatch'. That wrongful curtailment is a result of the Respondent's failure to fulfil his statutory obligations under Section 32 of the Electricity Act, 2003. That on 24.09,2019, the Hon'ble High Court of Andhra Pradesh, in its Judgment in W.P. No. 9844 of 2019 & batch, inter alia directed APSLDC and APTRANSCO not to take any coercive action qua curtailing, stopping evacuation or the likes of it except after giving due notice to the generators. Subsequently, owing to rampant curtailment, the Petitioner filed 1A No. 1 of 2020 in W.A, No. 383 of 2019 inter alia seeking directions for the constitution of an independent expert committee comprising technical experts such as CEA and Power System Operation Corporation ("POSOCO"). In a similar application, i.e., 1A No. 1 of 2020 in W.A. No. 477 of 2019, the Hon'ble High Court directed POSOCO to ascertain if the curtailment instructions issued by APTRANSCO/APSLDC are in terms of applicable laws. On 12.08.2021, the Hon'ble Appellate Tribunal for Electricity passed an Order in Appeal No. 126 of 2020, while noting curtailment being on account of economic reasons, appointing POSOCO to verify the grid frequency, power purchase data for the period commencing from 14.07.2020 to 15.09.2020, and to submit a report within four weeks as to whether the curtailment of Wind Generators was justified or not.

Further, the parties were also directed to provide the data to POSOCO within two weeks from the date of the Order, and accordingly, the matter was posted for hearing on 11.10.2021.

However, till date, no data has been submitted by APTRANSCO/APSLDC. The Civil Appeal No. 6474 of 2021 filed by APTRANSCO/APSLDC against Hon'ble APTEL's Order dated 12.08.2021 was dismissed by the Hon'ble Supreme Court vide Order dated 09.09.2022. That on 15.03.2022, the Hon'ble High Court of Andhra Pradesh disposed of W.A. No. 383 of 2019 & batch, upholding the Ld. Single Judge's order to the limited extent that Renewable Energy Generators have been bestowed upon with Must Run Status and thus no curtailment of renewable energy shall be resorted to without prior notice and cogent reasons. That the Guidelines issued by the Forum of Regulators ("FoR Guidelines") pursuant to the APTEL's Judgment Dated 02.08.2021 provide for operating parameters, for issuing the curtailment instructions. The FoR Guidelines also recognise that the renewable energy plants have been given Must Run status, and unless the protocol specified thereunder has been complied with, the renewable power plants cannot be curtailed. It also referred to the various orders issued by the GoI on the must-run status of RE plants and GOI Rules on payment of compensation if must-run Rules are violated.

Per contra, Respondent 2 stated that in the real-time operation of the Grid, curtailment is necessitated due to (a) non-completion of lines, (b) forced outage of Inter Connecting Transformer (ICT) and (iii) due to Grid Security reasons the curtailment instructions have been issued to all the Wind Developers connected to 440 KV Uravakonda GSS because of limitation of transformation capacity and non-completion of 220 KV Kalyandurg-Borampalli Transmission line in time. The curtailment instructions were issued for the above types of requirements in real-time operation. The Petitioner has clubbed all four types of curtailments issued regarding their project and claimed compensation for loss of generation, stating all curtailments are due to the non-availability of evacuation. That the

curtailment instructions given, on consideration of Grid Security, does not come under insufficient evacuation capacity; that the Petitioner has mixed up the issue of evacuation constraint in the transmission system with the curtailment instructions issued by Respondent No.2 under Clauses 5.2(m), 5.4.2(a) and 6.4.7 of the IEGC for maintaining Grid Security and wants to get benefit out of the same; and that, therefore, the claim of the Petitioner for compensation is contrary to law and the contractual terms. That the judgement of the Hon'ble High Court does not relate to the curtailment due to transmission constraints, but the said Judgement is related to curtailment during real-time grid operation. That post the Judgement dt 24.09.2019, as directed by the Hon'ble High Court of A.P, APSLDC has been issuing prior notices in compliance with the said Judgement, which was reiterated in Division Bench judgement Dt15.03.2022. That the grid security curtailment instructions were uploaded from August 2019 to May 2020 on the APTRANSCO website in compliance with the Judgement dated 24.09.2019 in WP no 9844 of 2019 and batch. All this curtailment energy is also included in the Petitioner's claim as curtailment due to insufficient evacuation capacity at Uravakonda. Therefore, all the compensation claims are contrary to law and contractual terms. That after the orders of APTEL dt 02.08.2021, On 09-10-2021, APSLDC challenged the orders of APTEL in the Hon'ble Supreme Court of India vide Civil Appeal 6474 of 2021. The Hon'ble Supreme Court however dismissed the said Civil Appeal on 09.09.2022. by giving liberty to APSLDC to raise all its contentions before APTEL. Subsequently, the S.L.D.C has filed a modification petition in APL 126 of 2020 seeking interim orders to appoint any other expert body like CEA than the POSOCO. Therefore, the allegation of illegal curtailment is not correct. That recognition of deemed generation by the Ministry of Power, Government of India is applicable only for projects selected by following competitive bidding guidelines 2017, but not

to the Petitioner. The Tariff paid to this Petitioner differs from the bidding guidelines issued by G.O.I in 2017.

The Commission carefully examined the above-noted rival stands of the parties. There is no dispute regarding the must-run status granted to RE plants. Be that as it may, the generation from the same can be curtailed for grid security reasons as per the IEGC Regulations. Per se, the Orders/Rules of GoI on payment of compensation are not applicable if the must-run rules are violated unless the Commission adopts them in its Regulations. The SLDC is placing the curtailment notices on its website as per the Hon'ble High Court Orders. The genuineness of its curtailment directions in various cases is still under adjudication before various fora, including this Commission. The Petitioner's case is related to transmission constraint at Uravakonda SS, and the same has already been dealt with infra. SLDC has stated that it has given the curtailment directions based on the following provisions in IEGC and the Code of Interface issued by APERC.

“INDIAN ELECTRICITY GRID CODE

5.2 (m) All Users, SEB,, SLDCs, RLDCs, and NLDC shall take all possible measures to ensure that the grid frequency always remains within the 49.5 –50.2 Hz band.

5.2 (u) Special requirements for Solar/ wind generators System operator (SLDC/ RLDC) shall make all efforts to evacuate the available solar and wind power and treat as a must-run station. However, System operator may instruct the solar /wind generator to back down generation on consideration of grid security or safety of any equipment or personnel is endangered and Solar/ wind generator shall comply with the same. For this, Data Acquisition System facility shall be provided for transfer of information to concerned SLDC and RLDC

(i) SLDC/RLDC may direct a wind farm to curtail its VAR drawl/injection in case the security of grid or safety of any equipment or personnel is endangered.

(ii) During the wind generator start-up, the wind generator shall ensure that the reactive power drawl (inrush currents incase of induction generators) shall not affect the grid performance.

5.4.2 Demand Disconnection

(a) SLDC/ SEB/distribution licensee and bulk consumer shall initiate action to restrict the drawal of its control area, from the grid within the net drawal schedule whenever the system frequency falls to 49.7 Hz

6.4.7. The SLDC, SEB/distribution licensee shall always endeavour to restrict the net drawal of the state from the grid to within the drawal schedules whenever the system frequency is below 49.7 Hz. The concerned SEB/distribution licensee User, SLDC shall ensure that their automatic demand management scheme mentioned in clause 5.4.2 acts to ensure that there is no overdrawl when frequency is 49.5 Hz or below. If the automatic demand management scheme has not yet been commissioned, then action has to be taken as per manual demand management scheme to ensure zero overdrawal when frequency is 49.5 Hz. or below.

APERC - Grid Code

Frequency Management

SLDC shall monitor the frequency of the transmission system and take action to ensure that they are within acceptable limits in coordination with SRLDC. Corrective action shall be initiated when frequency deviates by 1% from the nominal value. Whenever the frequency tends to fall below 50.0 Hz SLDC shall increase the drawals from Generating Stations, including ISGS, according to a pre-arranged pattern based on economic and merit order despatch. Inter-state drawals also may be increased/ commenced as per agreements in force.

SLDC shall monitor actual drawal against scheduled drawal and regulate internal generation/demand to maintain this schedule. The scheduled drawal shall be intimated by SLDC beforehand to all Users (DISCOMs and EHT Customers). The scheduled drawal shall be estimated from previous maximum drawal (power as well as daily energy drawal). The DISCOMs can exceed the scheduled drawal by 5% without prior approval on any single day provided the frequency is above 49.5 Hz but must obtain prior approval from SLDC to continue the excess drawal from the second day onwards. The drawal can be increased without limit with prior approval of SLDC. Normally, SLDC is expected to approve increase in load if the generation margin is deemed sufficient.

Generators and CPPs shall follow the despatch instructions issued by SLDC.

SLDC shall issue standing instructions to all DISCOMs and EHT consumers to reduce load by a given percentage at different low frequencies. APTRANSCO may request SRLDC to institute similar procedure in other Southern States.

Distribution Companies shall cooperate with SLDC in managing load, especially for maintaining the frequency during contingencies such as unexpected generation outage, by reducing the drawal from the transmission system on instruction from SLDC.

Whenever the frequency is below 49.5 Hz, the drawals shall be restricted to drawal schedules. When the frequency falls below 49.0 Hz requisite load shedding shall be arranged by SLDC through the DISCOMs.

Frequency indicating meters shall be installed at ALDC control rooms, EHT Sub Stations, 33 kV Sub Stations feeding more than 10 MW and in the premises of EHT consumers, captive power plants and cogeneration units. Standing instructions may be given by SLDC regarding action to be taken when frequency falls below 50 HZ.

4.3.8.1 High Frequency Related Emergencies

When the frequency is tending to increase above the statutory upper limit, SLDC shall request the Generators to reduce generation and request SRLDC to take necessary action at Regional level. While reducing generation, merit order despatch procedure shall be followed by SLDC. In order to implement the merit order despatch, the relevant cost data shall be furnished by all CDGUs on one-month ahead basis.

The instructions to reduce generation will be issued by SLDC by Telephone communication. Failure of a Generator to follow the SLDC instructions in this context will constitute a violation of the CTI and will entail penalties.

During periods of high frequency operation, the SLDC telephone instructions to Generators shall supercede other provisions of the CTI, and all Acts, Rules and Regulations of State and Central Governments. Adequate authority shall be delegated to the duty Engineers of SLDC to enable them to take spot decisions for on-line operation of the Grid.

On demand by a generator, the SLDC shall confirm its verbal instruction by written instruction after the operation is completed. SLDC is responsible for complying all Codes, Acts, etc and must justify its instructions in the light of Codes, Acts, etc or must be ready to justify any deviation in dealing with an unforeseen emergency threatening the security of the Grid.”

SLDC placed a lot of data showing its curtailment directions in terms of the above. The Petitioner stated that each curtailment direction should be seen with reference to FOR model RE curtailment Guidelines. In the present case, it is related to transmission constraint at Uravakonda SS, which has been dealt with infra. Hence, there is no necessity of examining each curtailment instruction issued by SLDC. The Petitioner achieved CUF over 23.5 during FY 2018-19, indicating the adequacy of the Transmission System before the problem encountered with

Transformers capacity at Uravakonda SS. Therefore, SLDC instructions based on the transmission constraints at Uravakonda SS, subsequently in the interest of Grid Security, can not be treated as a violation under section 32 (2) of the Electricity Act, 2003.

On the alleged failure of Respondent 3, the Petitioner relied on clauses 2 & 6 of the MOU dated 15.10.2014 and sections 39 (C), 57 (2) and 86 (1) (e) of the Electricity Act, 2003.

Clauses in the MoU and the relevant provisions of the Electricity Act 2003, as mentioned above, are extracted herein.

MOU:

Clause 2

APTRANSCO has given connectivity to the upcoming 400/220KV Uravakonda Substation (expected to be completed by June 2015) at 220KV Voltage level by constructing of 220KV Pooling Substation at generating site and laying of 220 kV Moose DC.

Clause 6

During the validity of this MOU/PPA, APTRANSCO shall not make connectivity to any other applicant/ firm for any purpose whatsoever, but however, APTRANSCO shall have the right to allocate connectivity to other developer if the developer fails to achieve milestones indicated above.

The Electricity Act, 2003

Section 34. (Grid Standards):

Every transmission licensee shall comply with such technical standards, of operation and maintenance of transmission lines, in accordance with the Grid Standards, as may be specified by the Authority.

Section 39 (2) (C)

(2) The functions of the State Transmission Utility shall be -

(a) to undertake transmission of transmission system; electricity through intra-State

(b) to discharge all functions of planning and co-ordination relating to intra-state transmission system with -.....

(c) to ensure development of an efficient, co-ordinated and economical system of intra-state transmission lines for smooth flow of electricity from a generating station to the load centres;

Section 57 (2)

Section 57. (Consumer Protection: Standards of performance of licensee):

(1) The Appropriate Commission may, after consultation with the licensees and persons likely to be affected, specify standards of performance of a licensee or a class of licensees.

(2) If a licensee fails to meet the standards specified under sub-section (1), without prejudice to any penalty which may be imposed or prosecution be initiated, he shall be liable to pay such compensation to the person affected as may be determined by the Appropriate Commission: Provided that before determination of compensation, the concerned licensee shall be given a reasonable opportunity of being heard.

(3) The compensation determined under sub-section (2) shall be paid by the concerned licensee within ninety days of such determination..

Section 86. (Functions of State Commission): --- (1) The State Commission shall discharge the following functions, namely: -

.....

(e) promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;”

The Petitioner has averred that by June 2017, various other power generators had also been connected to Uravakonda GSS and consequently, the Respondents resorted to curtailment on the grounds of inadequacy of the Transmission System/Uravakonda GSS. That from the date of commercial operation till the date of filing of the Petition (May 2020), there has been a loss of generation of Rs. 68.39 Crores. That pertinently, even as late as October 2017 (when the Uravakonda GSS was supposed to operate at total capacity), APTRANSCO commissioned 315 MVA ICT-4 at Uravakonda GSS instead of the planned 500 MVA. Despite all the transformers not being functional, and Uravakonda GSS functioning at 1445 MVA at that time APTRANSCO added 337.8 MW of wind energy load on temporary basis, which resulted in connecting a total load of 1755.2 MW against the available evacuation capacity, i.e., 1445 MVA. No justification has been provided for the same. That the Commission, in exercise of powers vested under Section 57 (1), 57 (2) and 86 (1)(i) of the Electricity Act, 2003 has framed Andhra Pradesh Electricity Regulatory Commission (Transmission Standards of Performance) Regulations, 2007 ("Performance Standards Regulations") and clause 6.6 of the said Regulations, unequivocally provides that, in the event of non-compliance with the standards specified in the Regulation, the user of the system is liable to receive compensation. In the present case, the APTRANSCO and the APSLDC have failed to maintain an adequate transmission system, i.e. Uravakonda GSS. That APTRANSCO is admittedly a statutory corporation, having functions and duties prescribed under the provisions of the Act, as well as under the Regulations framed by the Commission and thus, as per the settled law vide Supreme Court judgement in *NHAI v. Aam Aadmi Lokmanch*, (2021) 11 SCC 566, the petitioner is entitled to be compensated for the loss suffered by it.

Per contra, Respondent 3 APTRANSCO, denying the above contention, stated that the main grievance put forth by the Petitioner is that APTRANSCO failed to provide adequate transmission systems and that some more generators which ought to have been connected to 220kV Borampally-Kalyandurg line were connected to Uravakonda and thus caused transmission constraints. The details of the capacity of the transmission system i.e. the capacity of transformers and the Uravakonda lines with reference to C.E.A manual containing transmission planning, makes the claims of Petitioner, nonest. It is also pleaded that it had achieved the SoP with respect to Uravakonda SS as specified in the Regulation, except for the period relating to outages of ICT 3 & ICT 4. That the curtailment issued is not due to lack of adequate transmission system but due to forced outages of transformers because of technical/unexpected reasons. Neither PPA nor Regulations contemplate deemed generation or Compensation for such deemed generation. Section 57 of the Electricity ACT, 2003 is applicable only when the performance of licensee / APTRANSCO is not in accordance with the standard of performance regulations, 2007. But in this instant case, the performance of APTRANSCO, except during the forced outages period, is absolutely in accordance with the regulation, and that there is no default in this regard. APTRANSCO has achieved all desirable standards as per clause 5.3 of the regulation. In the absence of default on the part of APTRANSCO as contemplated in regulations, section 57 of the Electricity Act 2003 is not applicable.

The Commission has carefully examined the above rival submissions. As regards the Petitioner's reliance on the MoU, the MoU is related to the connectivity of the pooling substation to the Grid substation. The connectivity is granted as per the MoU except for the insufficiency of the transformation capacity at Uravakonda GSS. The insufficiency of the transformation capacity is the

subsequent development after the commissioning of the plant as per the data shown supra. Therefore, the Commission is of the view that there is no breach of MoU by APTRANSCO. The Grid substation is meant for all wind plants planned in the Anantapur District and not only the Petitioner's plants. The curtailment of power was done for many reasons. The Commission has issued orders fixing certain percentage curtailment for the generators connected at Uravakonda SS through various orders based on the prevailing conditions at that time. The Hon'ble APTEL also upheld these orders. Hence, there is no merit in the Petitioner's argument that the Respondent granted connectivity to many other generators, and therefore, its power injection is curtailed. The Respondent stated that its substation and Line capacities were more than the wind-installed capacity connected to Uravakonda SS as per the transmission planning criteria issued by the CEA. The relevant part of transmission planning criteria is extracted herein.

Transmission Planning Criteria issued by the CEA

"16. Additional criteria for wind and solar projects

6.1 The capacity factor for the purpose of maximum injection to plan the evacuation system, both for immediate connectivity with the ISTS/Intra-STG and for onward transmission requirement, may be taken as given in Table-II at Annexure III.

16.2 The 'N-1' criteria may not be applied to the immediate connectivity of wind/solar farms with the ISTS/Intra-STG grid i.e. the line connecting the farm to the grid and the step-up transformers at the grid station.

16.3 As the generation of energy at a wind farm is possible only with the prevalence of wind, the thermal line loading limit of the lines connecting the wind machine(s)/farm to the nearest grid point may be assessed considering 12 km/hour wind speed.

16.4 The wind and solar farms shall maintain a power factor of 0.98 (absorbing) at their grid interconnection point for all dispatch

scenarios by providing adequate reactive compensation and the same shall be assumed for system studies.

Annexure 3-Table- II

Capacity Factors - for Renewable Energy Source (wind/solar generation) capacity factor, considering diversity in wind/solar generation, is the ratio of maximum generation available at an aggregation point to the algebraic sum of the capacity of each wind machine / solar panel connected to that grid point. Actual data, wherever available, should be used. In cases where data is not available, the capacity factor may be calculated using the following factors:

<i>Voltage level/Aggregation level</i>	<i>132kV/Individual wind/solar farm</i>	<i>220kV</i>	<i>400kV</i>	<i>State (as a whole)</i>
<i>Capacity Factor (%)</i>	<i>80%</i>	<i>75%</i>	<i>70%</i>	<i>60%</i>

The Petitioner stated that the criteria provided under Table II (shown above) of CEA Transmission Planning Criteria apply to substations with diverse wind and solar generation and do not apply to its case. But, as read above, this applies to all wind or solar power stations.

Suppose the above criteria apply to the power transformer capacities at Uravakonda SS at different time points. In that case, there was no under capacity of the substation at any point of time for the connected wind capacities at Uravakonda SS, as shown below.

Date	Power Transformer's transformation capacity at Uravakonda 400kV SS (A)	Equivalent Wind capacity permissible to be connected to the given power transformers (A/0.7)	Total Installed Wind Power Capacity connected at 400kV SS
30.06.2017	1130 MW	1614.MW	1022 MW
12.10.2017	1445 MW	2064 MW	1593 MW
24.05.2018	1445 MW	2064 MW	1755 MW
From 10.05.2019	1630 MW	2328 MW	

Hence, there is no merit in the Petitioner's argument that the under capacity at Uravakonda caused the curtailment.

The Petitioner also raised the issue of the 220 kV Borrampalli and Kalyanadurg line, which has nothing to do with the connectivity at Uravakonda SS. This argument is also devoid of merit since the line will reduce the connectivity burden at Uravakonda SS. There is no statutory failure in planning the said line to minimise the connectivity burden at Uravakonda SS as the wind generation is intermittent; based on the connectivity granted, the transformation capacity at Uravakonda planned by the Respondent is in conformity with the transmission planning criteria issued by CEA., and hence it acted in accordance with section 39 (2) of the Electricity Act, 2003.

As regards the time horizons for the Transmission Planning, particularly the Borrampalli -Kalyandurg Line, as per para 8.2.1 of Transmission planning criteria, the concept of commissioning for transmission elements generally takes three to five years; about

three years for augmentation of capacitors, reactors, transformers etc., and about four to five years for new transmission lines or substations. Therefore, system studies for firming up the transmission plans may be carried out with a 3-5 year time horizon. The contemplation of the Borrampalli -Kalyanadurg 220 kV line in 2018 based on the realistic situation can not be faulted, considering the above. The said line was completed within three years despite the RoW issues.

The Petitioner's reliance on Section 57 (2) is irrelevant as it is intended for consumers. The consumer definition, as per the Electricity Act, 2003, is extracted herein.

"consumer" means any person who is supplied with electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving electricity with the works of a licensee, the Government or such other person, as the case may be;"

From the above definition, ex-facie, the Petitioner is not a consumer of the licensee, and therefore, the above provision has no relevance. The Respondents have provided sufficient material showing that they have complied with the provision of the standards of the performance Regulations issued by the Commission except for the ICTs outages period, which are beyond their control. The restoration of the ICTS was done under the close supervision of the Commission as per the daily Orders in OP no 54 of 2019. Hence, the Commission, exercising its power under clause 7.8 of SOP Regulations, grants exemption for the period of Outages in complying with substations' availability under clause 5.3. (d).

No material is placed before the Commission to show that Respondent 2 APTRANSCO violated the Grid Standards issued by CEA in the operation and maintenance of its lines.

The Commission has already taken many measures under section 86 (1) (e) for the promotion of RE in the State, and the mention of this section by the Respondent also has no relevance. The Petitioner's reliance on the Comments in RST Order dated 10.02.2020 regarding grid security have no relevance to the case on hand as they were made in a different context. The Respondent 1's attempt to negotiate tariff with the Petitioner based on the GoAP's directions can not be construed as the curtailment instructions issued based on economic considerations. The various judgements relied upon by the Petitioner and referred to supra have no application to the case on hand in the light of the findings rendered herein above.

Based on the above discussion, the Commission is of the view that Respondent 3 has not failed in its statutory obligations under the Electricity Act, as the Petitioner alleged.

In view of the foregoing, there is no statutory failure on the part of Respondents as alleged by the Petitioner. The project is established based on the generic tariff determined by APERC for wind power plants, and its generation depends on various factors. In PPA, there is no clause that if the Petitioner's plant achieves less than 23.5 CUF for any reason, it shall be compensated. Hence, seeking deemed generation loss due to transformer constraints at Uravakonda SS is not in the scope of PPA or any other law as there is no statutory violation by the Respondents.

The Petition is dismissed. In the circumstances, there shall be no order as to the costs.

Sd/-
P.V.R Reddy
Member

Sd/-
Justice C.V. Nagarjuna Reddy
Chairman

Sd/-
Thakur Rama Singh
Member