



**ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION**

4<sup>th</sup>Floor, Singareni Bhavan, Red Hills, Hyderabad 500004

MONDAY, THE TWENTY SIX DAY OF SEPTEMBER  
TWO THOUSAND AND TWENTY TWO

:Present:

**Justice C.V. Nagarjuna Reddy, Chairman**  
**Sri P. Rajagopal Reddy, Member**  
**Sri Thakur Rama Singh, Member**

**OP Nos.66 and 85 of 2021**

**OP No.66 of 2021**

**Between**

ZR Renewable Energy Pvt. Ltd, A Company incorporated  
Under the Companies Act, 1956, Having its registered office at No. 11,  
2nd Floor, Alcazar Plaza & Towers, 6-3-249/6, Banjara Hills,  
Hyderabad-500 033,  
Represented by its Authorized Representative  
M. Revant Sharan. ... Petitioner

**and**

1. Southern Power Distribution Company of Andhra Pradesh Limited  
A company registered under the Companies Act, 1956, Having its office at  
19-13-65/A, Raghavendra Nagar, Kesavayana Gunta, Tiruchanoor Road,  
Tirupati-517501, Represented by its Managing Director.
2. The Transmission Corporation of Andhra Pradesh Limited, Vidyut  
Soudha, Eluru Road , Gunadala, Vijayawada, Andhra Pradesh 520004,  
Represented by Chairman and Managing Director.

... Respondents

**OP No.85 of 2021**

**Between:**

Beta Wind Farm Private Limited, Bascon Futura,  
IV Floor, 10/1, Venkatanarayana Road, T.Nagar,  
Chennai-600017.

... Petitioner

**and**

Southern Power Distribution Company of Andhra Pradesh Limited,  
D.No.19-13-65/A, Srinivasapuram, Tiruchanoor Road,  
Tirupati - 517503, Andhra Pradesh.

... Respondent

These two Original Petitions have come up for hearing finally on 10-08-2022 in the presence of Sri D.Narendra Naik, learned counsel for the petitioner in O.P.No.66 of 2021 and Ms.Harini Subramani, learned counsel representing Sri Anand K.Ganesan, learned counsel for the petitioner in O.P.No.85 of 2021 and Sri P. Shiva Rao, learned Standing counsel for the respondents in both the O.P.s., after carefully considering the material available on record and after hearing the arguments of the learned counsel for both parties, the Commission passed the following:

**COMMON ORDER**

These two petitions have been filed by Wind Power Developers for identical reliefs. Hence, they are being disposed of together.

Since the pleadings and reliefs claimed are analogous, it will suffice if facts in one of the O.Ps., are specifically dealt with. Accordingly, the facts in O.P.No.66 of 2021 are narrated, in brief, hereunder:

The petitioner has set up a wind based project for production of electricity with the capacity of 16 MW with 0.08 MW meant for Auxiliary Consumption. A PPA was entered between the petitioner and respondent No.1, whereas the respondent agreed to pay tariff, without Accelerated

Depreciation (AD) benefit, at Rs.4.84 ps., per kWh in O.P.No.66 of 2021 and at Rs.4.70 ps., for kWh in O.P.No.85 of 2021 without AD benefit. The petitioner started submitting its bills as per the PPA for the energy generated and supplied by it. However, respondent No.1 withheld a part of the bill amount. During the correspondence between the petitioner and the respondents, it has emerged that respondent No.1 has withheld the amounts on account of limiting billing to energy calculated at the maximum of 23.5% Capacity Utilization Factor (CUF) calculated on annual basis in respect of the petitioner in O.P.No.66 of 2021 and 23% in the case of the petitioner in O.P.No.85 of 2021. This was seriously objected by the petitioners.

As regards the petitioner in O.P.No.66 of 2021, the objection was on the ground that as the maximum useful life of the plant was taken as 25 years, CUF shall be calculated at the end of the 25 years period. However, the petitioner in O.P.No.85 of 2021 contested the action of the respondents on the ground that the PPA does not restrict billing to the maximum CUF which has meant only for arriving at the tariff by this Commission and that in the absence of any provision in the PPA, restricting the billing to 23.0% CUF, the respondents cannot arbitrarily disallow payment for the energy generated in excess of the 23.0% CUF.

As the respondents have not acceded to the petitioners' request for releasing the withheld amounts, they have filed the present OPs., with the prayer that the respondents shall pay bills without limiting the to CUF 23.5% / 23.0% as the case may be.

**Background facts:**

**O.P.No.66 of 2021:**

In exercise of its power under Section 61 of the Electricity Act, 2003 (for short "the Act"), this Commission has framed the Terms and Conditions for Tariff Determination for Wind Power Projects in the State of Andhra Pradesh for the Control Period FY2015-16 to FY2019-20. Under this Regulation, this Commission has fixed parameters for framing Tariff under

Section 62. These parameters include the Tariff Period, Tariff Structure with the cost components, Return on equity, Interest on loan capital, Depreciation, Interest on working capital, Operation and Maintenance expenses, Useful life of the Plant for Fixed Levelised Tariff etc. The Regulation prescribed CUF for the Control Period as 23.5%. Clause 27(ii) of the Regulation envisaged that the Model PPAs earlier approved by the Commission shall be applicable to all the Wind Power Projects established, since these Regulations coming into force also to the extent they are in consonance with the said Regulations.

Following the said Regulation, PPA was entered by the petitioner and respondent No.1 on 27-4-2016.

**O.P.No.85 of 2021:**

The erstwhile Commission entertained a petition filed by Indian Wind Energy Association under Sections 61(h), 62, 86(1)(a), 86(1)(b) and 86(1)(e) of the Act for determination of Tariff for Wind Power Projects in the erstwhile State of Andhra Pradesh, which was taken on file as O.P.No.13 of 2012 and by its order dated 15-11-2012 laid down parameters for fixation of Tariff. Certain parameters fixed in its latter order as applicable to O.P.No.66 of 2021, discussed supra, varied with those fixed in its order dated 15-11-2012. These parameters include CUF, which was taken as 23%. On applying the said parameters, the Tariff arrived at Rs.4.70 ps., per unit in O.P.No.85 of 2021 as against the Tariff of Rs.4.84 ps., in O.P. No.66 of 2021.

**Contentions:**

Sri D.Narendra Naik, learned counsel for the petitioner in O.P.No.66 of 2021 and Ms.Harini Subramani, learned counsel representing Sri Anand K.Ganesan, learned counsel for the petitioner in O.P.No.85 of 2021 advanced their submissions. Apart from their oral submissions, they have also filed their written submissions.

The following is the gist of the submissions made by the learned counsel for the petitioners:

- (a) The action of the respondents in restricting billing to the CUF adopted for fixation of Tariff is highly arbitrary and contrary to the terms of the PPAs.
- (b) Clause 1.5 of the PPA clearly defines the term “Delivered Energy” as with respect to any billing month, the kilo-watt hours (kWh) of electrical energy generated by the Project and delivered to the DISCOM at the interconnection point as defined in Article 1.11 (O.P.No.66 of 2021), and Article 1.10 (O.P.No.85 of 2021); that under Article 2.1 (O.P.No.66 of 2021) and Explanation (2) to Article 1.5 (O.P.No.85 of 2021) the “Delivered Energy” in a Billing Month shall be limited to the energy calculated based on the Capacity agreed for export to network for sale to DISCOM as mentioned in Preamble and Schedule-I; that both the Preamble and the Schedule referred to the capacities of the Projects excluding the auxiliary consumption; and that under Article 2.2 the Wind Power Producer shall be paid Tariff for energy delivered at the interconnection point for sale to DISCOM at the prescribed Tariff; and
- (c) There is no Clause in the PPA which restricts billing to the CUF, which is relevant only for the purpose of fixing the Tariff; that normative parameters for fixing the Tariff are different from Operational parameters; and that by restricting payment to the maximum CUF, the petitioners are unduly denied payment for the energy generated and delivered by them while the respondents are making unjust enrichment. In support of their contentions, the learned counsel relied upon the Judgment of the APTEL in **Chhattisgarh Biomass Energy Developers Association Vs. Chhattisgarh State Electricity Regulatory Commission and three others<sup>1</sup>**, and the Judgments of the Hon'ble Supreme Court in **Nabha Power Ltd (NPL) Vs. Punjab**

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<sup>1</sup>) Judgment dt.29-4-2013 of the APTEL in Appeal No.63 of 2012 and batch.



***State Power Corporation Ltd (PSPCL) and others<sup>2</sup>, Transmission Corporation of Andhra Pradesh Ltd., and others Vs. GMR Vemagiri Power Generation Limited and others<sup>3</sup>; and SUO MOTU WRIT PETITION © No.3 of 2020 in Re: Cognizance for Extension of Limitation.***

An additional Point was advanced by Sri Narender Naik, viz., that the CUF shall be calculated for the entire PPA period and not annually.

Opposing the above submissions, Sri P. Siva Rao, learned Standing Counsel for the respondents has made the following submissions:

- a) The Commission has made Regulations, fixing norms for arriving at the Tariffs taking various parameters into account, such as, return on equity, interest on loan capital, depreciation, interest on working capital, operation and maintenance expenses, capacity utilization factor and useful life of the plant.
- b) Unlike in Thermal and Hydel power generation, no variable cost is involved in generation of Wind Power; that being single part tariff, the entire expenditure is covered by this tariff with no variable cost; that the entire expenditure, including the profit margins, having already been factored in the Tariff, no additional or further expenditure is involved in generating power beyond the CUF; and
- c) The Commission has taken the maximum CUF at 23.5% and 23%, as the case may be, on the assumption that the plants will not perform beyond the said CUF. If higher CUF was taken into consideration, the Tariff would have been lower. Thus, having taken advantage of higher Tariff with lower CUF, the petitioners will be making unjust enrichment by claiming payment for generation in excess of the CUF fixed by the Commission with no additional cost involved in the generation of the power beyond the prescribed CUF. The learned Standing Counsel

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<sup>2</sup> ) (2018) 11 SCC 508

<sup>3</sup> ) AIR 2018 SC 2965 = (2018) 3 SCC 716

accordingly urged that the petitioners are not entitled to any payment for the energy generated and delivered by them in excess of the prescribed CUF.

The Commission has carefully considered the submissions of the learned counsel for the parties with reference to the material on record. On such consideration, the following points arise for consideration:

- 1) Whether the billing limited to the maximum CUF can be read as the implied term of the PPAs?
- 2) Whether CUF shall be calculated annually or for the entire duration of the PPA?
- 3) To what relief?

**Point No.1:** Whether the billing limited to the maximum CUF can be read as the implied term of the PPAs?

For adjudication of this point, reference to the relevant Articles of the PPAs becomes necessary. They are reproduced hereunder:

**Para 2 in O.P.No.66 of 2021:**

**“2.** WHEREAS, the Wind Power Producer is setting up the New and Renewable Energy Project i.e., the 16 MW capacity Wind power project at Tallaricheruvu (V) Tadipatri Mandal, Anantapuram District, Andhra Pradesh (hereafter called the Project,) with a proposal of 0.08 MW for Auxiliary Consumption and 15.92 MW for export to grid for Sale to DISCOM as detailed in Schedule-1 attached herewith, and New and Renewable Energy Development Corporation of Andhra Pradesh Limited hereafter referred to as NREDCAP has accorded approval to the said project in their proceedings No.NREDCAP/WE/10654/ZR/2011, Dated 25.08.2011 and NREDCAP/WE/10654/ZR/2015, dt.15.04.2015 and the Wind Power Producer has entered into an Agreement with NREDCAP on 25.08.2011 and the copies whereof are attached herewith as Schedule-II and Schedule III respectively”.

**Para 2 in O.P.No.85 of 2021**

**“2. WHEREAS,** the Wind Power Producer is setting up the New and Renewable Energy Project i.e., the 50.4 MW capacity Wind power project at Kadavakallu in Sy. Nos. 1422-1 of Cherlopalli (V), Sy. Nos. 542, 543, 544, 545-1, 546-1, 547-1, 548, 550 to 560 of Chalavemula (V), Sy. Nos. 662 to 666 of Chintalapalli (V) & Sy. Nos. 701 to 704 of Chilamakur (V), Anantapur District, Andhra Pradesh {hereafter called the Project,) with a proposal of 0.252 MW for Auxiliary Consumption and 50.148 MW for export to grid for Sale to DISCOM as detailed in Schedule 1 attached herewith, and New and Renewable Energy Development Corporation of Andhra Pradesh Limited hereafter referred to as NREDCAP has accorded approval to the said project in their proceedings No. NEDCAP/WE/4922/2008, dt: 28-01-2008, NEDCAP/WE/RCI/5695/2009, dt: 13-10-2009 and NREDCAP/WE/RCI/Beta/4972/2012 dated: 07-07-2012 and the Wind Power Producer has entered into an Agreement with NREDCAP on 04 August, 2012 and the copies whereof are attached herewith as Schedule 2 and Schedule 3 respectively”.

**Article 1.5 (O.P.No.66 of 2021):**

**“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 1.11, as measured by the energy meter at the Interconnection Point during that Billing Month.

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.

Explanation 2: The delivered energy in a Billing Month shall be limited to the energy calculated based on the Capacity agreed for



export to network for sale to DISCOM as mentioned in Preamble and Schedule-I, multiplied with number of hours and fraction thereof the project is in operation during that billing month. In case any excess energy is delivered no payment shall be made for the same” .

(PPA in O.P.No.85 of 2021 also contains the same definition with certain conditions including a formal, which may not be relevant for the present purpose).

**Article 1.7 in O.P. No.66 of 2021:**

**“1.7. Due Date of Payment** means the date on which the amount payable by the DISCOM to the Wind Power Producer hereunder for Delivered Energy, if any, supplied during a Billing Month becomes due for payment, which date shall be thirty (30) days from the Meter Reading Date provided the bill is received by DISCOM within 5 days from Meter Reading Date, and in the case of any supplemental or other bill or claim, if any, the due date of payment shall be thirty (30) days from the date of the presentation of such bill or claim to the designated officer of the DISCOM”.

**Article 1.6 in O.P.No.85 of 2021:**

**“1.6. Due Date of Payment** means the date on which the amount payable by the DISCOM to the Wind Power Producer hereunder for Delivered Energy, if any, supplied during a Billing Month becomes due for payment, which date shall be thirty (30) days from the Metering Date provided the bill is received by DISCOM within 5 days from metering date, and in the case of any supplemental or other bill or claim, if any, the due date of payment shall be thirty (30) days from the date of the presentation of such bill or claim to the designated officer of the DISCOM”.

**Articles 2.1 and 2.2 in O.P.No.66 of 2021:**

“2.1. All the Delivered Energy at the interconnection point for sale to DISCOM will be purchased at the tariff provided for in Article 2.2 from and after the date of Commercial Operation of the Project. Title to Delivered Energy purchased shall pass from the Wind Power Producer to the DISCOM at the Interconnection Point”.

“2.2. The Wind Power Producer shall be paid tariff for energy delivered at the interconnection point for sale to DISCOM, which shall be firm at Rs.4.84 per unit without considering Accelerated Depreciation for a period of 25 Years from the Commercial Operation Date (COD) as per APERC order dated 26.03.2016 in O.P. No.13 of 2016”.

**Articles 2.1 and 2.2 in O.P.No.85 of 2021:**

“2.1. All the Delivered Energy at the interconnection point for sale to DISCOM will be purchased at the tariff provided for in Article 2.2 from and after the date of Commercial Operation of the Project. Title to Delivered Energy purchased shall pass from the Wind Power Producer to the DISCOM at the Interconnection Point”.

“2.2. The Wind Power Producer shall be paid tariff for energy delivered at the interconnection point for sale to DISCOM, which shall be firm at Rs.4.70 per unit for a period of 25 years from the Commercial Operation Date (COD) as per APERC order No 13/2012 dt.15.11.2012”.

**Article 5.1 in O.P.No.66 of 2021:**

“5.1. For Delivered Energy purchased, Wind Power Producer shall furnish a bill to the DISCOM calculated at the rate provided for in Article 2.2, in such form as may be mutually agreed between the DISCOM and the Wind Power Producer, for the billing month on or before the 5th working day following the Meter Reading Date”.

**Article 5.1 in O.P.No.85 of 2021:**

“5.1. For Delivered Energy purchased, Wind Power Producer shall furnish a bill to the DISCOM calculated at the rate provided for in Article 2.2, in such form as may be mutually agreed between the DISCOM and the Wind Power Producer, for the billing month on or before the 5th working day following the Meter Reading Date”.

**Schedule-I in O.P.No.66 of 2021**

**SCHEDULE-I**  
**Particulars of the Project**  
**(Referred to in the Preamble to the agreement)**

<b>Name of the Project</b>	<b>Location</b>	<b>No. of Wind Energy Converters</b>	<b>Capacity of the Project in MW</b>	<b>Power export to the grid in MW</b>
ZR Renewable Energy Pvt. Ltd.	Tallaricheruvu (V) Tadipatri Mandal, Anantapuram District.  Location Nos. Survey Nos. 1. - 721/1,720/3 2. - 721/3, 722/1 3. -723, 723/3 4. -724/1, 720/1 5. -724/3, 724/5 6. -1328, 1329 7. -1327 8. -1574	8 Nos  (2 MW Each)	16	15.92

\* Out of 16 MW, 0.08 MW is for Auxiliary Consumption and 15.92 is for export to grid for sale to DISCOM”.

**Schedule-I in O.P.No.85 of 2021****SCHEDULE I****Particulars of the Project****(Referred to in the Preamble to the agreement)**

Name of the Project	Location	No. of Wind Energy Converters	Capacity of the Project in MW
Beta Wind Farm Pvt. Ltd.	Kadavakallu in Sy.Nos.1422-1 of Cherlopalli (V), Sy. Nos.542,543,544, 545-1, 546-1, 547-1, 548, 550 to 560 of Chalavemula (V), Sy.Nos.662 to 666 of Chintalapalli (V) & Sy.Nos.701 to 704 of Chilamakur (V), Anantapur District, Andhra Pradesh.	28 Nos (28 Nos. X 1.8 MW Each)	50.4 MW

\* Out of 50.4 MW, 0.252 MW is for Auxiliary Consumption and 50.148 MW is for export to grid for sale to DISCOM”.

Based on the Articles of the PPAs, as reproduced above, the learned counsel for the petitioners have strongly urged that the PPAs envisage purchase of the “Delivered Energy” at the Interconnection Point for sale by the respondents at the tariff provided for in Article 2.2., i.e., Rs.4.84/Rs.4.70 ps per unit without considering Accelerated Depreciation (AD) for a period of 25 years. The learned counsel further submitted that under Explanation-2 of Clause 1.5 the only limitation prescribed on the energy to be delivered in a billing month is up to the capacity agreed for export to network for sale to the DISCOM, as mentioned in the Preamble

and Schedule-I, and that as per Para 2 of the Preamble and the Schedule, after excluding the auxiliary consumption, the power export to the Grid is mentioned in terms of MW i.e. in case of O.P No.66 of 2021 it is 15.92 MW and in case of O.P.No.85 of 2021 it is 50.148 MW. Both the learned counsel vehemently submitted that nowhere in the PPAs is there reference to the CUF and, therefore, the respondents cannot be permitted to construe the Articles of the PPAs based on the implied term in the absence of any express term in the contract. The learned counsel further submitted that while framing the generic tariff through Regulations under Section 61 of the Act, this Commission assumed a certain percentage of CUF and that the same cannot be of any relevance for billing purposes. Placing heavy reliance on the Judgment of the Apex Court in **Nabha Power Ltd (2 supra)**, the learned counsel submitted that in the face of the express terms of the PPAs, the respondents cannot act on the Regulations framed by this Commission for the purpose of determination of tariff as if there exists an implied term in the PPAs. The learned counsel also relied upon the Judgment of the Hon'ble APTEL in **Chhattisgarh Biomass Energy Developers Association (1 supra)**.

Sri P.Shiva Rao, learned Standing Counsel for the respondents, however, controverted the above submissions and argued that on the facts and in the circumstances of the case, it is necessary to consider the maximum prescribed CUF as an existing term of the PPA by necessary implication. He has also submitted that CUF has to be calculated on an annual basis and not by taking the entire PPA duration.

We have given our earnest consideration to the submissions of the learned counsel for the parties.

As regards the Judgment of the Hon'ble APTEL in **Chhattisgarh Biomass Energy Developers Association (1 supra)**, it was a case where approval of tariff for biomass energy by the Chhattisgarh State Electricity Regulatory Commission for the FY 2012-13, passed after remand, was challenged before the APTEL. One of the issues raised before the APTEL was



whether true up of biomass plants was required/ permissible or not? The Appellate Tribunal held that where all the parameters of generic tariff are decided on normative basis, the true up is not required to be carried out. In that context, the Tribunal held that if the generator performs better than the normative parameters, it gains by retaining the profits of its efficiency and, on the other hand, if the actual performance is worse than the normative parameters, then it has to bear the loss and the same is not passed on to the consumers.

Based on the above observations, the learned counsel for the petitioners submitted that if the petitioners' plants performed better than the assumed CUF, which was only a normative parameter, they cannot be denied the gains of such better performance. In our opinion, the above observations of the Hon'ble Tribunal are sought to be relied upon by the learned counsel, out of context. As noted above, those observations came to be made by the Tribunal in a totally different context, where true up was sought to be undertaken in respect of biomass plants. The present are not such cases. All that the respondents contend is that since the petitioners had the benefit of higher tariff based on the normative parameter relating to CUF, they cannot be allowed to make unjust enrichment by claiming charges for the energy generated in excess of the CUF. In our view, the observations in the Judgment of the APTEL, as discussed above, may not apply to the present set of facts of these cases.

Coming to the judgment of the Apex Court in ***Nabha Power Ltd (2 supra)***, the Hon'ble Supreme Court has undertaken detailed review of the case law on the aspect of how a commercial contract has to be interpreted and laid down the legal principles of interpretation of a commercial contract. It has made a copious reference to the English and Indian case law. A careful reading of this judgment shows that **The Moorcock case - (1889) 14 PD 64** - is the bedrock for understanding the proposition of interpretation of the terms of a commercial contract. It has been laid down in the said Judgment that whenever an implied warranty or covenant in law

is read by the Court, it presumes the intention of the parties with the object of giving to the transaction such efficacy as both the parties must have intended that at all events they should have. That in business transaction such as this, what the law desires to effect by the implication is to give such business efficacy to the transaction as must have been intended at all events by both parties who are businessmen; not impose on one side all the perils of the transaction, or to emancipate one side from the all chances of failure, but to make each party promise in law as much, at all events, as it must have been in the contemplation of both parties that he should be responsible for in respect of those perils or chances. While considering the proposition of Law on implied term of contract as propounded in **The Moorcock case, The King's Bench in Shirlaw Vs. Southern Foundries (1026) LD (1939) 2 KB 206** added another test, viz., "The Officious Bystander Test", and held that: "Prima facie that which in any contract is left to be implied and need not be expressed is something so obvious that it goes without saying; so that, if, while the parties were making their bargain, an officious bystander were to suggest some express provision for it in their agreement, they would testily suppress him with a common 'Oh, of course!' At least it is true, I think, that, if a term were never implied by a judge unless it could pass that test, he could not be held to be wrong". After referring to various other English cases, all of which have discussed the ratio in **The Moorcock case**, the Hon'ble Supreme Court in **Nabha Power Ltd, (2 supra)**, deduced a legal principle comprising one of five conditions for reading an implied term in a contract. They are: (1) it must be "reasonable and equitable"; (2) it must be "necessary to give business efficacy to the contract"; (3) it must be so obvious that 'it goes without saying' (The Officious Bystander Test) ; (4) it must be "capable of clear expression"; and (5) it "must not contradict any express term of the contract". The Hon'ble Supreme Court termed the above as the Penta Principles.

Indeed, the Judgment in the **Transmission Corporation of Andhra Pradesh Ltd. (3 supra)** did not lay down any contra proposition to that of **Nabha Power Ltd, (2 supra)**. On the contrary, the Apex Court has reiterated the legal principle that the terms of a contract may be expressed or implied from what has been expressed and that the principle of Business Efficacy will also have to be kept in mind for interpreting the contract. The Supreme Court has discussed **The Moorcock** and some other English cases also as in **Nabha Power Ltd, (2 supra)**.

In the light of the legal dicta, as discussed above, we shall now consider - whether the CUF could be read as an implied condition in the PPAs or not?

The tariff fixed in the instant cases is a feed-in tariff based on the generic tariff arrived at by the erstwhile Commission, vide: its Order dated 15-11-2012 in O.P.No.13 of 2012, in the case of O.P.No.85 of 2021; and by the Andhra Pradesh Electricity Regulatory Commission Terms and Conditions for Tariff Determination for Wind Power Projects in the State of Andhra Pradesh for the period FY2015-16 to FY2019-20 (Regulation 1 of 2015), in the case of O.P.No.66 of 2021. In the former order, while considering various parameters for arriving at the generic tariff, the erstwhile Commission has taken CUF as 23%. In Clause 21 of Regulation 1 of 2015, this Commission has, similarly, fixed CUF as 23.5%, which is applicable to O.P.No.66 of 2021. As rightly contended by the respondents, the percentage of CUF has a direct bearing on the fixation of tariff - in that, higher is the CUF, lower would be the tariff. The generic levelized tariff was arrived at by taking various parameters into consideration, such as, CUF, capital cost, debt equity ratio, loan and finance charges, depreciation, return on equity, interest on working capital, operation and maintenance expenses etc. Unlike Thermal Power Projects, tariff relating to Renewable Energy is a single-part tariff, inasmuch as the entire cost component is subsumed in the tariff structure. The reason for this is that in the absence of consumables, such as fuel and oil, there would be no expenditure

incurred towards variable charges. Once all the capital and other expenditure is covered in the tariff structure, expenditure does not vary depending upon the level of generation. This necessarily means that even if the plant performs beyond the fixed CUF capacity of 23% or 23.5%, as the case may be, no additional expenditure whatsoever is incurred unlike in the case of Thermal and other similar projects where consumption of fuel is involved in generation of every unit of energy. Thus, once the plant reaches the maximum prescribed CUF, it will recover the entire expenditure, capital and otherwise, and also the prescribed profit margin. Thus, having had the advantage of getting the tariff fixed at a particular level of CUF, payment for the generation beyond the prescribed CUF would be a windfall for the generator. One of the essential conditions of Business Efficacy, as laid down in **The Moorcock** and other cases, as discussed in **Nabha Power Ltd, (2 supra)**, would come into play in cases as these.

In this context, the observations of the Hon'ble Supreme Court in the **Transmission Corporation of Andhra Pradesh Ltd. (3 supra)** assume relevance. In that case, the generator pleaded that the term "natural gas" shall also include 'RLNG' which was claimed to be a form of natural gas. The Supreme Court, however, rejected the said plea and made the following observations:

"Para 27. The aforesaid discussion, therefore, leads to the inevitable conclusion that the intention of the parties under the agreement, as amended from time to time, was to generate power from fuel reasonably priced, so as to ultimately make available power to the consumers at reasonable rates. The choice of fuel as natural gas only has, therefore, to be understood as being confined to natural gas only and its natural form. The respondent was well aware that RLNG was never intended to be included in the definition of natural gas as understood by the parties, notwithstanding that it may be a variant of natural gas".

Applying the Business Efficacy test, it is not possible to accept the plea of the petitioners to make full payment for the energy generated beyond the prescribed CUF in the absence of the petitioners incurring any extra expenditure for such generation. In fact, even in cases of Thermal generation, where two-part tariff is applicable, the extant Regulations provide for payment of only variable cost for the units generated beyond the prescribed PLF (synonymous to CUF) in addition to payment of a certain percentage of tariff as incentive for such units generated. In our considered opinion, the same analogy shall be applied to the cases on hand. Since no variable cost is involved in these cases, the question of payment of any additional amount under this head for the excess generated units would not arise. However, for generating excess energy, which would be usefully utilized by the respondents, equity warrants payment of certain percentage of tariff fixed under the PPA, so that it operates as an incentive for the generators on the one side and a reasonable obligation on the respondents to pay a part of the tariff for the additional advantage enjoyed by them for receiving the extra quantum of energy. Such a course also satisfies the condition that the implied term “must be reasonable and equitable”. Even in the absence of a clause in the PPA restricting the billing to the prescribed CUF, the implied term also, in our opinion, passes “The Officious Bystander Test”, inasmuch as, having regard to the fact that no extra expenditure is involved in the generation beyond the prescribed CUF, there would have been no necessity for the parties for having an express term to restrict the billing to the prescribed CUF.

As regards the condition that the implied term must not contradict any express term of the contract, as noted above, the learned counsel for the petitioners have relied upon the Preamble, Articles 1.5, 1.7 (1.6 in O.P.No.85 of 2021), Articles 2.1 and 2.2 and 5.1 besides Schedule-I to drive home their stand that the PPAs specifically prescribe the capacity of the project and billing based on all the “Delivered Energy”. Nodoubt, literally construed, the PPAs do not refer to the CUF as a factor for billing. However,



having regard to the background in which tariff has been arrived at and the process peculiar in Renewable Energy Generation, as discussed above, CUF for billing purpose must be read as an implied term. Otherwise, it would result in unjust enrichment to the generators at the cost of the consumers. None of the above referred terms of the PPAs expressly exclude CUF from being considered for billing. Therefore, it can be said that the implied term relating to the CUF does not contradict the express terms. On the contrary, from the Business Efficacy point, the CUF factor must be implied. In this context it needs to be noted that it is an undeniable fact that the tariff for Wind and Solar Power has come down steeply over the years. Instead of paying the high tariff of Rs.4.70/4.84 for the energy generated by the Developers having PPAs beyond the prescribed CUF, the DISCOMs may choose the option of buying cheaper power from new Developers. It will, therefore, be unjust for the petitioners to insist that the respondents shall receive energy generated in excess of the prescribed CUF and demand payment of PPA tariff for such energy.

**Point No.1** is, accordingly, answered.

**Point No.2:** Whether CUF shall be calculated annually or for the entire duration of the PPA?

The petitioner in OP No 66 of 2021 has contended that even if an upper limit is imposed on the production of electricity at CUF, it shall take into consideration the electricity produced over a period of twenty five years as a whole, which is the useful life of the project for limiting the energy at CUF. On the other hand, the respondent DISCOMS have contended that clause 18 of CERC regulations 2017 specifies 8766 hours for calculation of CUF and clause 21 of APERC regulation 1 of 2015 specifies normative CUF at 23.5 percent for the control period and therefore it is being applied year-wise for limiting the energy produced by the petitioner's wind power plant. In this regard, the working sheet of levelised tariff applicable to the

petitioner's power plant in OP no 66 of 2021 has been furnished by the DISCOMS vide memo dated 20.06.22. As can be seen from the worksheet furnished by the DISCOMs, even though the useful life of the plant is considered as 25 years for arriving at the levelised tariff, the tariff was computed year-wise based on the energy corresponding to the prescribed CUF for arriving at the levelised tariff . Hence, the calculation of CUF only on an annual basis is appropriate.

However the Commission has noted that because of the inconsistent wind seasons as can be seen from the generation data furnished for 4 years of operation by the petitioner in OP no 66 of 2021, the petitioners may not be able to recover the approved capital cost as considered by the Commission in its tariff orders dated 26.03.2016 and 15.11.2012 if they produce energy at less than the prescribed CUF in certain years of operation even if they achieve cumulative CUF more than prescribed CUF by the end of useful life. While the DISCOM is concerned with the over recovery of the capital cost approved by the Commission if the energy produced is more than the prescribed CUF, generation below the prescribed CUF in certain years will lead to under -recovery of the capital cost at the end of the useful life of the plant if payment is limited to prescribed CUF. Therefore, having carefully examined the issue, and to ensure equity & reasonableness, it is necessary to consider the excess energy produced over and above the CUF in any of the years of operation for adjustment of shortfall energy up to the CUF in any year of operation at PPA tariff during the useful life of the plant. Therefore, the CUF shall be calculated at the end of each year of operation from the COD cumulatively, and accordingly, the petitioners shall be paid at PPA tariff up to the cumulative prescribed CUF, and for the energy injected over and above the cumulative CUF, it shall be paid for at the incentive fixed by the Commission in this order. The annexure of this order contains a model illustration of the method of billing to account for variation in actual CUF vis a vis the prescribed CUF as explained in this order. Accordingly, at the end of each year of the operation from the COD till the useful life of the

plant, the payments to the petitioners shall be reconciled and regulated with reference to the cumulative CUF achieved up to that year of operation.

This point is accordingly decided.

**Point No.3: To what relief?**

In the facts and circumstances of the case, we feel that payment of a sum of Rs.0.50 ps per unit (twice the incentive of Rs.0.25 ps per unit applicable for thermal plants prescribed in APERC regulation 1 of 2008, because wind plants generate clean energy) for the energy generated and supplied in excess of the prescribed CUF subject to adjustment as held in point no 2 and illustrated in the **annexure** to this order will meet the ends of justice. Accordingly, the respondents are directed to calculate the energy and pay/adjust the amounts depending on excess or shortfall as the case may be within two months from the date of receipt of this order.

The O.Ps., are accordingly disposed of.

**Sd/-**  
**Thakur Rama Singh**  
**Member**

**Sd/-**  
**Justice C.V. Nagarjuna Reddy**  
**Chairman**

**Sd/-**  
**P.Rajagopal Reddy**  
**Member**

## Annexure

**Model Illustration for billing to account for variations in CUF during the useful life of the Wind plants OP No 66 & OP No 85 of 2021**

Assumptions		
A	Energy corresponding to prescribed CUF	100 Units
B	PPA Tariff	Rs.2 per unit
C	Incentive to be paid for the energy generated over and above the prescribed CUF	20 paise per unit
D	The Useful Life of wind plants	10 years

	Sl.No	Year of operation from COD	1	2	3	4	5	6	7	8	9	10	Total for the useful life
At prescribed CUF	1	Energy at prescribed CUF, year wise during the useful life(Units)	100	100	100	100	100	100	100	100	100	100	1000
	2	Cumulative Energy at prescribed CUF, year wise during the useful life(Units)	100	200	300	400	500	600	700	800	900	1000	1000
	3	Revenue at prescribed CUF at PPA tariff year wise during the useful life, (Rupees)	200	200	200	200	200	200	200	200	200	200	2000
	4	Cumulative Revenue at prescribed CUF at PPA tariff year wise during the useful life, (Rupees)	200	400	600	800	1000	1200	1400	1600	1800	2000	2000
At Actual CUF	5	Actual Energy generated (at greater/less than prescribed CUF) year wise during the useful life	95	106	110	88	106	108	85	110	105	95	1008
	6	Cumulative Actual Energy generated , year wise during the useful life(Units)	95	201	311	399	505	613	698	808	913	1008	1008
	7	Cumulative Payment to be made to the developer, year wise during the useful life (Rupees)	95*2 190	200*2+1*0.20 400.20	300*2+11*0.20 602.2	399*2 798	500*2+5*0.2 1001	600*2+13*0.2 1202.6	698*2 1396	800*2+8*0.20 1601.6	900*2+13*0.2 1802.6	1000*2+8*0.20 2001.6	
	8	Final Payment to be made at the end of each operational year during the useful life (Rupees)	190	400.2-190.00 210.20	602.20-400.20 202.00	798-602.20 195.8	1001-798 203	1202.6-1001 201.6	1396-1202.60 193.4	1601.60-1396 205.6	1802.60-1601 201	2001.60-1802.60 199	2001.6
Note	<p>1. The capacity shall be limited as per the PPA conditions in each time block for arriving at the delivered energy of each billing month.</p> <p>2. During the year, up to the approved CUF, PPA tariff shall be paid and as and when the energy generated exceeds the CUF level during the operational year, the incentive shall be paid for the energy over and above the CUF level and finally the payments for the year shall be reconciled at the end of operational year.</p>												