

Nos.: N/3/16, N/4/16 & N/5/16

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**BEFORE THE KARNATAKA ELECTRICITY REGULATORY COMMISSION,  
BENGALURU**

**Dated : 5<sup>th</sup> January 2017**

**Present:**

Shri M.K. Shankaralinge Gowda	..	Chairman
Shri H.D. Arun Kumar	..	Member
Shri D.B. Manival Raju	..	Member

**O P No. 3 / 2016**

**BETWEEN:**

India Power Corporation Limited,  
Plot No.X-1, 2 & 3, Block-EP, Sector-V,  
Salt Lake City,  
Kolkata – 700 091

..

**PETITIONER**

*[Represented by its Director]*

**AND:**

Bangalore Electricity Supply Company Limited,  
K.R. Circle,  
Bengaluru – 560 001

..

**RESPONDENT**

*[Represented by Just Law, Advocates]*

**O P No. 4 / 2016**

**BETWEEN:**

India Power Corporation Limited,  
Plot No.X-1, 2 & 3, Block-EP, Sector-V,  
Salt Lake City,  
Kolkata – 700 091

..

**PETITIONER**

*[Represented by its Director]*

OP Nos. 3/2016, 4/2016 and 5/2016

**AND:**

Bangalore Electricity Supply Company Limited,  
K.R. Circle,  
Bengaluru – 560 001 ..

**RESPONDENT**

*[Represented by Just Law, Advocates]*

**O P No. 5 / 2016**

**BETWEEN:**

India Power Corporation Limited,  
Plot No.X-1, 2 & 3, Block-EP, Sector-V,  
Salt Lake City,  
Kolkata – 700 091 ..

**PETITIONER**

*[Represented by its Director]*

**AND:**

Bangalore Electricity Supply Company Limited,  
K.R. Circle,  
Bengaluru – 560 001 ..

**RESPONDENT**

*[Represented by Just Law, Advocates]*

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**COMMON ORDER**

- 1) These three cases involve similar questions of law and fact and the parties are also the same. Hence, this common Order is being passed. The Petitioner has prayed for Project-specific tariffs in these cases from the eleventh year of the Commercial Operation Date of each of its Projects.

- 2) For the disposal of the above cases, the material facts urged by the Petitioner may be stated as follows :
- (a) That the Government of Karnataka by its Order No.EN 76 NSG 2005 dated 18.3.2005 had accorded sanction to the proposal of Enercon (India) Limited (Enercon) for installation of Wind Energy-based Electric Power Generating Stations of 192 MW capacity at Chitradurga Wind Zone, Chitradurga District, Karnataka. In paragraph-2 of the Petitions, it is stated that, out of the said 192 MW capacity allotted to Enercon, the Government of Karnataka by three separate orders dated 14.9.2005 transferred 2.4 MW, 3.2 MW and 4.8 MW capacities to SREI Equipment Finance Private Limited (SREI) at different locations in the said Wind Zone, within the limits of Lakkihalli and Gulihalli villages of Chitradurga District. SREI had placed orders for supply of Wind Turbine Generators (WTGs) with Enercon for establishing the said Wind Power Projects.
- (b) That the Petitioner – a Company registered under the Companies Act, 1956, in anticipation of supply of 13 nos. of WTGs, each with a capacity of 0.5 MW, in favour of SREI from Enercon, executed an Operating Lease Agreement dated 31.3.2005 with SREI for operating these Wind Power Projects.
- (c) That the Petitioner has executed three Power Purchase Agreement (PPA) dated 15.3.2006 in favour of the Respondent – Bangalore Electricity

Supply Company Limited (BESCOM) in respect of the above three Wind Energy Projects. The Preamble of these PPAs would indicate that, the Government of Karnataka has approved the transfer of 2.4 MW, 3.2 MW and 4.8 MW capacities of Wind Power Projects, from out of the capacities allotted to Enercon, to the Petitioner by three separate Orders dated 14.9.2005. However, the same Government Orders referred to in paragraph-2 of the Petitions, have been referred to in the Preamble of the PPAs to describe that these capacities of Wind Power Projects have been transferred from Enercon to the Petitioner. There is no document available on record explaining this discrepancy. The Petitioner has also not produced any Government Order authorizing it to execute the PPAs in favour of the Respondent. However, the execution of the PPAs dated 15.3.2006 by the Petitioner with the Respondent is not in dispute.

(d) That Articles 5.1, 5.2 and 9.1 of the PPAs read thus :

**“5.1 Monthly Energy Charges:**

- a. *BESCOM shall for the Delivered Energy pay, for the first 10 years from the Commercial Operation Date, to the Company every month during the period commencing from the Commercial Operation Date at the rate of Rs.3.40 (Rupees Three and forty paise only) kilowatt-hour without any escalation for energy delivered to BESCOM at the Metering Point.”*

"5.2 From the 11<sup>th</sup> year onwards, from the Commercial Operation Date, BESCO shall pay to the Company for the energy delivered at the Metering Point at a rate determined by the Commission. In case BESCO is unwilling to purchase the power at the rates determined by the Commission, the Company shall be permitted to sell energy to third parties and enter into a Wheeling & Banking Agreement with BESCO / Corporation to sell power for which it shall pay transmissions and other charges to BESCO / Corporation at the rates applicable from time to time as approved by the Commission."

"9.1 **Term of Agreement:** This Agreement shall become effective upon the execution and delivery thereof by the Parties hereto and unless terminated pursuant to provisions of the Agreement, shall continue to be in force for such time until the completion of a period of twenty (20) years from the Commercial Operation Date and may be renewed for such further period of ten (10) years under such terms and conditions as may be mutually agreed upon between the Parties subject to approval by the Commission ninety (90) days prior to the expiry of the said period of twenty (20) years."

- (e) That the dates of commissioning of the Wind Power Projects and the average Plant Load Factor (PLF) achieved by each of the Wind Power Projects for the last ten years from the Commercial Operation Date (COD) are as follows :

OP No.	Wind Power Project (Capacity in MW)	Commercial Operation Date	Average PLF (Percent)
3 / 2016	2.4	15.02.2006	20.13
4 / 2016	3.2	31.03.2006	19.93
5 / 2016	4.8	15.02.2006	20.68

- (f) When the period of ten years from the COD was about to expire, the Petitioner has filed these three Petitions before this Commission, seeking determination of levelized tariff of ₹4.61 per unit (in OP No.3/2016), ₹4.66 per unit (in OP No.4/2016) and ₹4.50 per unit (in OP No.5/2016) for the said Wind Power Projects, from the eleventh year onwards from the COD for the next ten years of the PPAs.
- (g) That this Commission had issued a generic Tariff Order dated 18.1.2005 in respect of the Renewable Sources of Energy. The said Order was made applicable to all the new Projects entering into PPAs filed before this Commission on or after 10.6.2004 for a period of ten years from the date of the COD of the Projects. In respect of the Wind Power Projects, the tariff determined was at ₹3.40 per unit, without any escalation for the first ten years from the COD.
- (h) That in respect of the Wind Power Projects in the above Order, the Commission adopted the following financial and operational parameters:
- |       |                             |    |   |
|-------|-----------------------------|----|---|
| (i)   | Project Cost                | .. | 425 Lakhs per MW  |
| (ii)  | Plant Load Factor (PLF)     | .. | 26.5%   |
| (iii) | O&M Expenses                | .. | 1.5% of the Project Cost,<br>With annual escalation of 5% |
| (iv)  | Interest on Working Capital | .. | 12.5% on 2 months' bills                                  |

- (v) Debt Equity Ratio .. 70 : 30
- (vi) Interest on Term Loans .. 11%
- (vii) Return on Equity .. 16%
- (viii) Depreciation .. 7% per annum  
Under Straight Line Method  
(SLM)
- (ix) Minimum Alternate Tax (MAT).. A uniform MAT at 7% on RoE
- (j) That the Petitioner has stated that, it had incurred a Project Cost of ₹490 Lakhs per MW and it could actually achieve an average PLF of 20.13%, 19.93% and 20.68%, respectively, pertaining to the above three Wind Power Projects. The summary of the operational and financial parameters assumed in the generic Tariff Order dated 18.1.2005 relating to the Wind Power Projects and the actuals of these parameters relating to the Petitioner's Projects as indicated in the Petitions are as follows :

Parameters	Assumptions in KERC RE Tariff Order dated 18.01.2005	Assumptions taken by the Petitioner for proposed tariff	Remarks for deviation
Capital Cost	Rs.425 Lakhs per MW	Rs.490 Lakhs per MW	The Petitioner has considered the actual values.
PLF	26.5%	20.13% (in OP 3/2016) 19.93% (in OP 4/2016) 20.68% (In OP 5/2016)	The Petitioner has considered the actual average values achieved in last 9 years.
Useful Life	20	20	

Parameters	Assumptions in KERC RE Tariff Order dated 18.01.2005	Assumptions taken by the Petitioner for proposed tariff	Remarks for deviation
Debt Equity Ratio	70 : 30	70 : 30	
Term of Loan (in years)	10	10	
Interest on Loan	11%	11% (first 10 years. 12.5% (beyond FY 2015-16)	For period beyond FY 2015-16, the rates specified in the latest Wind Tariff Order dated 24.02.2015 has been considered.
Return on Equity	16% post tax	16% post tax	
Depreciation	7% (SLM) for 10 years from COD	7% (SLM) for 10 years from COD and 2% for the remaining 10-year period.	
O&M expenses per annum	1.25% of the Project Cost with an annual escalation of 5%.	First 2 years- free 3 <sup>rd</sup> to 10 <sup>th</sup> year – Rs.4.41 Lakhs/WEG with escalation of 5.7%. Beyond 10 <sup>th</sup> year, Rs.11 Lakhs per WTG with an escalation of 5.72% per annum.	For first 10 years as per existing agreement with ENERCON. Beyond 10 years as anticipated in the market and other wind energy associations.



Parameters	Assumptions in KERC RE Tariff Order dated 18.01.2005	Assumptions taken by the Petitioner for proposed tariff	Remarks for deviation
Interest on Working Capital	12.5%	12.5% for first 10 years. 13.0% for period beyond FY 2015-16	For period beyond FY 2015-16, the interest rate has been taken from latest Wind Tariff Order dated 24.02.2015 issued by the Hon'ble Commission.
Overhauling Cost	N.A.	Rs.25 Lakhs / WEG (one time expense anticipated).	Overhauling is required after 10 years of operation.
Tariff	Rs.3.40 per KWhr for first 10 years	Rs.4.61 per KWhr in OP No.3/2016),  Rs.4.66 per KWhr (in OP No.4/2016) and  Rs.4.50 per KWhr in OP No.5/2016), levelized for 20 years.	Levelized tariff for 20 years covers the tariff required for remaining period of useful life.

Therefore, the Petitioner has prayed for a levelized tariff of ₹4.61 per unit (in OP No.3/2016), ₹4.66 per unit (in OP No.4/2016) and ₹4.50 per unit (in OP No.5/2016) for the said Wind Power Projects from the eleventh year of the COD.

- 3) The Respondent has appeared through its counsel and filed its Statements of Objections, which are similar in all cases. The gist of the said objections may be stated as follows :
- (a) That the execution of the PPAs and supply of energy at the rate of ₹3.40 per unit from the respective CODs are not in dispute.
- (b) That the issue of determination of tariff from the eleventh year onwards from the COD for the Renewable Energy Projects has already been covered by various Judgments / Order of the Hon'ble Supreme Court, Hon'ble Appellate Tribunal for Electricity (ATE) and this Commission. That in OP No.2/2011 in the matter of *MMPL Renewable Energy Private Limited –Vs- MESCOM and others*, this Commission has decided the said issue. That the prayer sought for by the Petitioner is untenable, as it seeks to modify the terms of a concluded contract.
- (c) That if a relief for determination of a Project-specific tariff, as sought for by the Petitioner, were to be granted, it would result in flooding of cases for determination of tariff, which is impractical and unworkable. The tariff fixed is based on the standard investment and technical parameters determined by this Commission after hearing the stakeholders.

- (d) That a party who has adopted a generic single part tariff, cannot later contend that he is entitled for re-fixation of the tariff based on a statement that he has invested certain amounts for putting up a Power Plant, other than the sums assumed in the generic Tariff Order.
- (e) That from the eleventh year onwards of the PPAs, the last paid tenth year tariff would be applicable and this issue has been gone into by this Commission in the matter of *MMPL Renewable Energy Private Limited-Vs-MESCOM and others*.
- (f) The Respondent has denied that, the Petitioner has incurred ₹490 Lakhs per MW towards the Project Cost and has denied incurring of higher cost in respect of the other financial parameters.
- (g) That the failure of the Petitioner to achieve the PLF of 26.5%, as determined by this Commission vide Order dated 18.1.2005, cannot be termed as a ground for revision of tariff. That the contention of the Petitioner that this Commission has not dealt with the issue of achievable PLF in the area where the Petitioner has been operating, is untenable, inasmuch as this Commission cannot take into consideration the PLF that can be achieved by each individual generating unit. That the averment of the Petitioner that the Petitioner's Projects have completed ten years from the COD, therefore there is need for revising the tariff for the next

- ten years on the basis of the actual results achieved by the Petitioner during the last ten years, is absurd and denied.
- (h) The petitioner at the time of entering into the PPAs, was virtually aware of the tariff that was applicable and the Project Cost that was to be incurred. Therefore, the Petitioner cannot, at this belated stage, contend that there is a deviation in the Capital Cost parameters and it needs revision of tariff. That the request for re-fixation of the tariff is a mere afterthought, with a motive of unjustly enriching itself at the cost of the consumers and it ought to be denied.
- (j) The Respondent has denied the veracity and the authenticity of the documents produced by the Petitioner. Therefore, the Respondent has prayed for dismissal of the Petition.
- 4) The Petitioner has filed its Rejoinder to the Statement of Objections of the Respondent, denying the merits of the contentions raised by the Respondent. It is stated that, although the parameters for fixing the tariff are by and large still valid, the variable factors which go into the determination of tariff have changed over a period of ten years from the date of passing of the 2005 generic Tariff Order. The Petitioner has stated that, in this regard, a recent generic Tariff Order dated 10.10.2013 and the subsequent orders relating to it may be considered. The Petitioner has further stated that, it is perfectly justified in seeking a rate hike,

keeping all the existing parameters intact, except for the PLF. Therefore, the Petitioner has prayed for allowing its prayer for a hike in the tariff.

5) We have heard the learned counsel for the parties. On the basis of the pleadings on record and the submissions made before us, the following issues would rise for our consideration :

(1) Whether the Petitioner is entitled to seek Project-specific tariff for its Projects from the eleventh year onwards from the COD?

(2) If Issue No(1) is answered in the affirmative, what shall be the tariff from the eleventh year onwards from the Commercial Operation Date?

(3) What Order?

6) After considering the material on record and the oral submissions made by the parties, our findings on the above issues are as follows :

7) **ISSUE No.(1)** : *Whether the Petitioner is entitled to seek Project-specific tariff for its Projects from the eleventh year onwards from the COD?*

(a) The Respondent has contended that, this Commission has decided in the case of *MMPL Renewable Energy Private Limited-Vs- MESCOM and others* and in other cases that, the tenth year tariff would apply to the eleventh year onwards for the remaining period of the PPA and therefore the

present Petitions are not maintainable. On the other hand, the Petitioner has contended that, the present Petitions for determination of tariff are maintainable.

- (b) In the case of *MMPL Renewable Energy Private Limited-Vs- MESCOM and others*, Article 5.2 of the PPA therein provided that, "From the eleventh year from the date of signing of the Agreement, the Corporation shall pay to the Company for the energy delivered at the Metering Point at a rate agreed by mutual negotiations. In case the parties do not arrive at a mutual agreement on the tariff, the Company shall be permitted to sell power to third parties." In that case, there was no agreement between the parties regarding the tariff payable from the eleventh year onwards, therefore, the Generator contended that the PPA had come to an end upon expiry of the first ten years, though the term of the PPA was for twenty years. This Commission has held in that case that, the parties cannot agree or disagree regarding the tariff payable from the eleventh year onwards and that it is the exclusive jurisdiction of the Commission to determine the tariff and that as per the generic Tariff Order dated 11.12.2009, the tenth year tariff would be applicable for the next ten years of the PPA for all Renewable Energy Projects.

- (c) The relevant portion of Article 5.2 of the PPAs in the present cases states that, '*From the 11<sup>th</sup> year onwards, from the Commercial Operation Date, BESCOM shall pay to the Company for the energy delivered at the*

*Metering Point at a rate determined by the Commission. In case BESCOM is unwilling to purchase the power at the rates determined by the Commission, the Company shall be permitted to sell energy to third parties...".*

- (d) While determining the generic tariff in respect of Renewable Sources of Energy by Order dated 11.12.2009, this Commission has determined the tariff for the existing Plants which have completed ten years of the PPA period. The finding of this Commission reads thus :

*"In view of the fact that, after completion of 10 years debt servicing will have been fully met and the only increase (marginal) would be in respect of O&M expenses, but at the same time the opportunity cost of the power has gone up, the Commission decides to allow the rate equal to the rate at the end of the tenth year, without escalation for the next ten years for all renewable projects. This tariff is also applicable to such PPAs in which ten years period is already completed but no tariff has been determined."*

- (e) In the generic Tariff Order dated 11.12.2009, while determining the tariff of the existing Plants which have completed ten years of the PPA period, the Commission has assumed that, the material parameter, viz., the PLF of the Project, remained unchanged. In the present cases, the Petitioner has contended that, in respect of all the three Projects, there was significant decrease in achieving the PLF. It cannot be denied that the PLF has a major impact on the total energy generation and thereby affects the total revenue recovery of a Project. In the generic Tariff Order

dated 18.1.2005, the PLF assumed for the Wind Power Projects was 26.50%. Whereas, the Petitioner has contended that its Project had achieved the average PLF of 20.13%, 19.93% and 20.68%, respectively. The Petitioner has also contended that, it had incurred a Project Cost of ₹490 Lakhs per MW, instead of a Project cost of ₹425 Lakhs per MW as assumed in the generic Tariff Order dated 18.1.2005.

- (f) The Respondent has not denied the average PLF achieved on the Petitioner's Projects. These are based on the total energy sold to the Respondent prior to the filing of these Petitions for nearly 9½ years. We hold that, the reduction in the achievement of the assumed PLF is a substantial variation, which would attract the determination of the Project-specific tariff. There is no prohibition in law on the power of this Commission to undertake such determination of the Project-specific tariff. Therefore, we answer Issue No.(1) in the affirmative.

- 8) **ISSUE No.(2)** : *If Issue No(1) is answered in the affirmative, what shall be the tariff from the eleventh year onwards from the Commercial Operation Date?*

- (a) Now, we shall examine the assumptions of different financial and operating parameters pleaded by the Petitioner for the determination of the tariff from the eleventh year onwards from the COD.



(i) Capital Cost :

As against ₹425 Lakhs per MW, the Petitioner has stated that it has spent ₹490 Lakhs per MW. In support of its contention, the Petitioner has produced invoices issued by Enercon for having sold 13 nos. of WTGs and for charges towards erection and commissioning of the WTGs. These invoices were raised in favour of SREI. Therefore, the presumption is that, SREI had to pay the amounts stated in these invoices and the Petitioner does not claim that it had paid the amounts due under these invoices. The Respondent has denied that the Project Cost was ₹490 Lakhs per MW. In such an event, the mere production of the invoices are not sufficient. The Petitioner should furnish evidence to show that the amounts had been actually paid as per these invoices. But, no such evidence is produced by the Petitioner. The Certificate of the Chartered Accountant produced by the Petitioner does not disclose that, on verification of the accounts, the Project Cost was assessed by the Chartered Accountant. Therefore, no importance can be given to the Certificate of the Chartered Accountant. When the Petitioner has pleaded that, actually it had incurred ₹490 Lakhs per MW towards the Capital Cost it had to prove the same by producing proper evidence. But, no such evidence is forthcoming. Hence, the Project Cost of ₹490 Lakhs per MW, pleaded by the Petitioner, cannot be accepted.

(ii) PLF :

As already noted, the Petitioner has pleaded that the Projects achieved 20.13% (in OP No.3/2016), 19.93% (in OP No.4/2016) and 20.68% (in OP No.5/2016). These figures are based on the average annual sales to the Respondent from the Projects. Therefore, we find no reason to differ from the PLF achieved from different Projects of the Petitioner. The weighted average of the PLF in respect of these Projects works out to 20.32%.

(iii) Interest on Loan :

The Petitioner has assumed 12.5% per annum as interest on loan from FY 16-17 onwards. The said rate is assumed by the Petitioner on the basis of the rate considered in the Tariff Order dated 24.2.2015. In the Tariff Order dated 18.1.2005, the interest on loan was considered at 11% per annum. The present trend shows that, the rate of interest on loan is going below 11%. Therefore, we hold that, the rate of interest on loan may be retained at 11% per annum, itself. In the present cases, the loan components do not exist after ten years from the COD. Hence, the interest on loan is not a relevant fact.

(iv) O & M expenses :

The Petitioner has considered ₹11 Lakhs per MW for 12 WTGs towards the annual maintenance expenses, with an escalation of

5.72% per annum from FY 16-17, which works to ₹14.54 Lakhs per MW from FY 16-17, with an escalation of 5.72% per annum for the subsequent years. The Petitioner has relied upon the annual maintenance charges agreed with Enercon on 9.5.2015. In the generic Tariff Order dated 24.2.2015, the O&M expenses of ₹9.51 Lakhs per MW for the year 2013-14 is allowed, subject to an escalation of 5.72% per annum. At this rate, the O&M expenses for FY 16-17 works out to ₹11.14 Lakhs per MW. Therefore, ₹11.14 Lakhs per MW may be taken as the O&M expenses from FY 16-17 for the Petitioner's Projects, with an escalation of 5.72% per annum. Apart from the O&M expenses, the Petitioner has also claimed employee cost and A&G expenses at the rate allowed towards the O&M expenses in the generic Tariff Order dated 18.1.2005.

(v) Interest on Working Capital

The Petitioner has claimed 13% per annum towards interest on Working Capital for the period beyond FY 15-16. As already noted above, as the short-term lending rate of interest is decreasing, 11% per annum may be retained towards interest on Working Capital.

(vi) Overhauling Cost :

The Petitioner has claimed ₹25 Lakhs per WTG as an one-time expenditure towards the anticipated overhauling expenses. The O&M expenses allowed would include the repairs and overhauling

expenses also. Therefore, a separate overhauling cost need not be allowed.

- (b) While determining the tariff for electricity from the Renewable Sources of Energy, this Commission shall be guided by the principles and methodologies, if any, specified by the Central Electricity Regulatory Commission (CERC), National Electricity Policy and the Tariff Policy. The proviso to Regulation 7(b) of the CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012 provides that, the financial norms as specified under Chapter 2 of these Regulations, except for the Capital Cost shall be the 'ceiling norms' while determining the Project-specific tariff. The same principle is also adopted by the CERC in the Regulations framed for the earlier tariff periods. Therefore, this Commission is of the view that, the financial norms adopted by this Commission in its generic Tariff Order dated 24.2.2015 for the Wind Power Projects, have to be treated as the 'ceiling norms'.
- (c) In the generic Tariff Order dated 24.2.2015 relating to the Wind Power Projects, this Commission has adopted the levelized tariff approach for the useful life of the Project by applying applicable discount factor and implemented the tariff for the term of the PPA. The useful life of the Wind Power Projects was taken as 25 years and the term of the PPA was taken as twenty years. In the present cases, the tariff is to be determined afresh from the eleventh year onwards from the COD. Therefore, the remaining

useful life of the Projects is to be taken as fifteen years and the tariff for the remaining ten years is to be determined.

(d) The Petitioner has taken the life of the Projects as twenty years and the tariff re-fixed for the whole twenty years, i.e., from 2006-07 to 2025-26, considering the financial and operating parameters pleaded in the Petitions. We are of the considered view that, the revised tariff should be determined for the remaining life of the Projects and the tariff should be determined from the eleventh year onwards from the COD of the Projects. The reasons for adopting the said approach by the Commission are as follows :

- (i) The Petitioner has claimed for the determination of tariff from the eleventh year onwards from the COD of the Projects. The Petitioner has not made any claim for recovery of the losses for the first ten years of the PPAs. Therefore, it is deemed that, the Petitioner has accepted all the financial and operating norms assumed under the generic Tariff Order dated 18.1.2005 for the first ten years of the PPAs.
- (ii) For establishing the actual loss incurred, if any, during the first ten years of the PPAs, the Petitioner is required to furnish the actual accounts relating to the Projects towards its income and expenditure. The Petitioner has not adopted that method. The

Petitioner cannot be allowed to rely on the actuals for establishing the income derived from the Projects and to rely on the normative parameters for establishing the expenditure incurred on the Projects. There are possibilities of the Petitioner not incurring the normative expenses on certain heads, for various reasons. That should be placed on record by the Petitioner. In the present cases, as per the understanding between Enercon and SREI while supplying 13 nos. of 800 KW WTGs it was agreed that Enercon should give a minimum generation guarantee of 18,00,000 units per WTG per year, for the first three years and 12,00,000 units per WTG per year, for the next four years, and in case of shortfall, to pay a penalty at the rate of the power purchase price for the first three years and to pay a penalty at the rate of ₹2 per unit for the remaining four years of shortfall in generation of energy. Further, it can also be seen that, Enercon itself had taken up the responsibility of giving free maintenance of the WTGs supplied for the first two years. There are also possibilities of the Petitioner saving certain amounts on the interest on the term loan and the interest on the working capital, as against the normative expenses assumed under these heads. Therefore, the Petitioner is required to give the actuals of the expenses incurred, before claiming that the actual PLF achieved was less than the normative PLF.

- (iii) It appears, as the Petitioner has not actually incurred losses, it has not approached during the first ten years period of the PPAs for determination of the Project-specific tariff. At page-24 of its reply, the Petitioner has stated that, *"It is also clear from the record that, at the time when the PPA was signed the tariff of Rs.3.40 / KWH was adequate, with the efflux of time, requires to be appropriately re-fixed, so that the generator is not only allowed to recoup the losses it has incurred, but is adequately compensated for the losses incurred."* Therefore, it shows that, from the eleventh year onwards from the COD, the Petitioner is seeking for the determination of tariff on the ground of shortfall in the PLF and the increase in the O&M costs.
- (iv) Only in the case of a new Wind Power Project, the adoption of the levelized tariff approach for the entire useful life of the Project would arise as per the CERC Regulations referred to above. In the present cases, the tariff is to be determined afresh from the eleventh year from the COD of the Projects. Therefore, it is proper to adopt the levelized tariff approach for the remaining useful life of fifteen years of the Projects, in the present cases.
- (e) For the above reasons, we are of the considered view that, the Petitioner cannot seek a levelized tariff for the whole life of its Projects – either for 20

years or for 25 years, but it can request for determination of tariff from the eleventh year onwards from the COD. Therefore, the tariff from the eleventh year onwards from the COD of the Projects is to be determined for the remaining life of the Wind Power Projects of the Petitioner, for a period of fifteen years, on the basis of the norms allowed by us as mentioned above.

- (f) In the present cases, the following are the parameters to be applied for determining the tariff from the eleventh year onwards of the COD of the Projects :

Sl.No.	Particulars	Value Adopted
(i)	Capital Cost per MW (in ₹ Lakhs)	425
(ii)	Debt-Equity Ratio	70 : 30
(iii)	Capacity Utilization Factor (CUF)(in %)	20.13 (In OP No.3/2016)  19.93 (In OP No.4/2016)  20.68 (In OP No.5/2016)
(iv)	Return on Equity (in %)	16
(v)	Discount Factor (in %)	16
(vi)	O&M Expenses (in ₹ Lakhs) (From FY 16-17 with an escalation at the Rate of 5.72% per annum)	11.14
(vii)	Working Capital	2 Months receivables
(viii)	Interest on Working Capital (in %)	11
(ix)	Depreciation for 15 years from FY 16-17 (in %)	1.333



- (g) Using the above parameters, the levelized tariff from the eleventh year of the COD of the Projects would work out to ₹2.32 per unit (in OP No.3/2016), ₹2.34 per unit (in OP No.4/2016) and ₹2.26 per unit (in OP No.5/2016).
- (h) The tariffs worked out as above are much below the tariff of ₹3.40 per unit determined in the generic Tariff Order dated 11.12.2009 for the existing Wind Power Projects which have completed ten years period from the COD. Therefore, in the present cases, enhancing the tariff above ₹3.40 per unit does not arise. Therefore, we answer Issue No.(2), accordingly.

9) **ISSUE No.(3)** : *What Order?*

For the foregoing reasons, we pass the following :

**ORDER**

- (1) The above Petitions are hereby dismissed.
- (2) The original of this Order shall be kept in OP No.3/2016 and copies thereof be kept in OP Nos.4/2016 and 5/2016.

Sd/-  
(M.K. SHANKARALINGE GOWDA)  
CHAIRMAN

Sd/-  
(H.D. ARUN KUMAR)  
MEMBER

Sd/-  
(D.B. MANIVAL RAJU)  
MEMBER