

BEFORE THE KARNATAKA ELECTRICITY REGULATORY
COMMISSION AT BANGALORE
Case No. O.P. 19 of 2012

In the matter of:

INDIAN WIND ENERGY ASSOCIATION ... PETITIONER

And

BESCOM LIMITED AND OTHERS ... RESPONDENTS

ADDITIONAL SUBMISSIONS ON BEHALF OF THE PETITIONER

The Petitioner most respectfully submits as under:

1. The Petitioner submits that the contents/averments contained in the Petition and the earlier Additional Submissions filed by the Petitioner may kindly be taken as integral part of these submissions. The same are not repeated here for the sake of brevity.
2. The Petitioner has filed the present Petition as an umbrella body of the Generating Companies in the State of Karnataka, a detailed list of which has been enclosed at Annexure - I to the Main Petition.
3. During the hearing held on 13th December, 2012, this Hon'ble Commission had enquired about the actual capital cost and capacity utilization factor for the projects which have been commissioned in the state of Karnataka.
4. With Respect to the Capital Cost of Wind Power Projects, the Petitioner submits that the Petitioner has hereby compiled the Capital Cost data

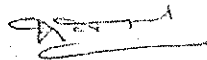


from its constituent members as well as other generators in respect of projects Commissioned from January, 2010 to March 2012

5. The details of individual projects are attached as ANNEXURE - 23. The Average Capital cost along with the Capacity Commissioned for each of these periods is as follows:
 - a. For 38 MW projects commissioned from Jan to March in 2010 :- Rs. 539 Lakhs / MW
 - b. For 94 MW projects commissioned in FY 2010-11 :- Rs. 532 Lakhs / MW
 - c. For 98 MW projects commissioned in FY 2011-12 :- Rs. 564 Lakh / MW

6. Further it is submitted that the charges for forecasting & scheduling requirement under the CERC Indian Energy Grid Code Regulations 2010, will also have implications on the overall projects cost for upcoming projects and the same has not been included in the capital cost mentioned above.

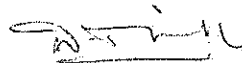
7. The one time consultancy charges for forecasting, tools and instruments required for forecasting like Communication facility, Meters and Instrumentation at the Substation, Central forecast server etc would result in additional costs of Rs. 10-15 L/MW. Therefore, keeping in line with other State Commissions such as Hon'ble Andhra Pradesh Electricity Regulatory Commission ("APERC"), Tamilnadu Electricity Regulatory Commission ("TNERC") and the Central Electricity Regulatory Commission, the petitioner has proposed the capital cost of Rs. 575 Lakhs / MW for future wind energy projects.



8. With respect to the Capacity Utilisation Factor ("CUF"), the petitioner submits that it has compiled the generation details from its members to arrive at an average CUF figure. The wind generation data has been compiled for WPGs commissioned post January, 2010 for two complete years of 2010-11 and 2011-12. The full year operational data for FY 12-13 would be available only after March, 2013.
9. Further, the compiled data relates to the generation at controller level, i.e. at the individual turbine level. Hence, the CUF so determined will indicate the CUF at controller level. The year wise Average CUF of Wind turbine generators observed at controller level is as follows:
- a. For WPP commissioned from Jan to March 2010 – 23.3% (2010-11) and 26.38% (2011-12), average CUF for both years - 24.8%;
 - b. For WPP commissioned in FY 2010-11 - 26.16% (11-12)

The details of CUF is produced herein at Annexure - 23

10. However, as there are losses due to step up transformer and the transmission at 33 kV, the actual billing is done after deducting the line losses determined on the basis of the bulk meter reading installed at the pooling substation. Thus, the resultant CUF will further get reduced by about 2% to 4% depending upon the line losses up to pooling substation. This can also be corroborated from the joint meter readings (JMR) data for bulk meter installed at the pooling substation for wind power projects.
11. Further, the petitioner submits that CUF varies from year to year and a particular year can be classified as good, average or poor wind year, depending upon the monsoon season. As seen from above, year 2011-



12 has been a good wind year (CUF 26.38%) compared to the previous year of 2010-11 (23.3%). Even with such a better wind availability the projects commissioned in 2010-11 operated at CUF of 26.16%. The projects commissioned in 2011-12 would have a still lower CUF; however the full year operational data would be available only after March, 2013.

12. It may also to be noted that the CUF mentioned above is for the projects which have been commissioned already. As mentioned in the main petition and in the additional submissions by the petitioner, the upcoming projects will have lower CUF since the sites now available in the state are having lower wind resource in the range below 200 w/m² to 250 w/m².

13. The petitioner has strived to analyse the WPD data available from the Centre for Wind Energy Technology's (CWET) list of wind monitoring station in Karnataka and the allotment details as per KREDAL website. As per the analysis, the achievable CUF would be in the range of 20% to 25%. The petitioner has accordingly proposed a CUF of 25% in its main submission considering the average CUF.

PRAYER

WHEREFORE, it is most respectfully submits that this Hon'ble Commission may be pleased to take the above facts and documents and allow the Petition as prayed in the interest of justice and equity.

Date: 11/1/2013

Place: B'lore.


ADVOCATE FOR PETITIONER

5

BEFORE THE HONOURABLE
KARNATAKA ELECTRICITY REGULATORY COMMISSION AT BANGALORE

NO. O.P. 19 of 2012

In the matter of:

Petition u/s 94(1)(f) of Electricity Act 2003 and Regulation 12 of KERC (Power Procurement from Renewable Sources by Distribution Licensee and Renewable Energy Certificate Framework) Regulations, 2011 to the extent of limiting the control period of KERC Tariff Order for Non-Conventional Energy Sources dated 11.12.09 and for determination of Tariff for future Wind Energy Projects in Karnataka u/s 61(h) of Electricity Act 2003.

In the matter of:

Indian Wind Energy Association ... Applicant

And

Bangalore Electricity Supply Company Limited

Hubli Electricity Supply Company Limited

Gulbarga Electricity Supply Company Limited

Mangalore Electricity Supply Company Limited

Chamundeshwari Electricity Supply Company Limited ... Respondents



AFFIDAVIT

I, V. Subramanian son of Shri S. Venkataraman aged about 64 years, residing at M-104, Ground Floor, Greater Kailash, Part II, New Delhi-110048 do hereby solemnly affirm and state on oath as under:

1. I am the CEO & Chairman of the Petitioner and am conversant with the facts of the case and am duly authorized by the Petitioner to swear to this affidavit.
2. The averments made in paragraphs 1 to 13 of the accompanying Additional Submissions are true to the best of my knowledge, information and belief. And Annexure P-23 is true copy of its original.

Solemnly affirmed at New Delhi, on this Tenth day of January, 2013 that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

All this is true

Identified by me

Advocate



ATTESTED

**NOTARY PUBLIC
DELHI (INDIA)**

[Signature]

DEPONENT

10 JAN 2013

CUF details of Wind Power Projects Commissioned in Karnataka since Jan 2010

5

FY	Site	Owner/ Project Developer	Date of Commissioning	CUF @ Controller		Aggregate Commissioned Capacity (MW)	Avg. Project Cost (Rs. L/MW)
				2010-2011	2011-2012		
09-10	Hassan	Friend Salt Works & Allied Industries	25-Mar-10	16.82%	17.87%	38.05	539.73
	Hassan	Technical Associates Ltd.	25-Mar-10	18.46%	20.50%		
	Kudrekonda	Bright Packaging Co. Pvt. Ltd.	27-Mar-10	27.47%	30.21%		
	Kudrekonda	H.G. Rangan Goud	27-Mar-10	26.15%	27.88%		
	Kudrekonda	Erra Enn Corp Ltd.	29-Mar-10	23.75%	26.43%		
	Sindhigere	MAC Charles (India) Ltd	29-Mar-10	19.97%	21.58%		
	Sindhigere	Scotta Garments Ltd.	30-Mar-10	32.20%	37.29%		
	Hassan	Palogix Infrastructure Private Limited	30-Mar-10	25.60%	29.30%		
	Jajikalgudda	Gautam Freight Pvt.Ltd	31-Mar-10	16.37%	18.39%		
	Jajikalgudda	Sree Minerals	31-Mar-10	21.55%	26.58%		
	Kudrekonda	Hira Ferro Alloys Ltd.	31-Mar-10	24.73%	29.90%		
	Kudrekonda	PTC India Financial Services Limited	31-Mar-10	28.57%	30.36%		
10-11	Sindhigere	Bombay Rayon Fashions Ltd.	9-Apr-10	27.19%	30.97%	93.95	532.20
	Sindhigere	ITC Limited, Bangalore	27-Jun-10	26.63%	33.41%		
	Kudrekonda	Pearlite Liners Pvt. Ltd.	26-Aug-10	18.81%	27.41%		
	Chitradurga	NSL Renewable Power Pvt. Ltd.	16-Sep-10	14.45%	20.23%		
	Chitradurga	NSL Renewable Power Pvt. Ltd.	22-Sep-10	12.77%	18.59%		
	Chitradurga	NSL Renewable Power Pvt. Ltd.	23-Sep-10	15.03%	21.38%		
	Kudrekonda	Rajasthan Gum Pvt. Ltd.	29-Sep-10	12.84%	19.00%		
	Kudrekonda	SRB Consultancy Pvt. Ltd.	30-Sep-10	14.41%	20.72%		
	Kudrekonda	Techno Rings	30-Sep-10	17.60%	27.52%		
	Sindhigere	ITC Limited, Bangalore	30-Sep-10	18.64%	27.01%		
	Sindhigere	KRBL Limited	30-Sep-10	23.46%	39.48%		
	Sindhigere	Orient Abrasives Ltd.	30-Sep-10	13.91%	29.85%		
	Sindhigere	KRBL Limited	2-Oct-10	12.89%	29.54%		
	Sindhigere	Orient Abrasives Ltd.	30-Jan-11	10.71%	27.84%		
	Chitradurga	Hutti Gold Mines Company Ltd (HGML)	30-Jan-11	11.19%	28.79%		
	Hassan	Hindustan Zinc Limited	24-Mar-11	0.00%	32.44%		
	Jajikalgudda	Maris Hotels & Theatres Pvt. Ltd.	31-Mar-11	0.46%	19.22%		
	Jajikalgudda	Maris Spinners Limited	31-Mar-11	1.90%	19.29%		
	Jajikalgudda	Vikram Traders	31-Mar-11	0.13%	21.33%		
	Kudrekonda	Kalbesuwar Refinery Pvt Ltd	31-Mar-11	0.59%	20.74%		
	Kudrekonda	M R Pasalkar	31-Mar-11	0.36%	29.16%		
	Kudrekonda	Mantri Homes	31-Mar-11	0.42%	26.79%		
	Kudrekonda	Rajasthan Gum Pvt. Ltd.	31-Mar-11	3.35%	32.05%		
	Kudrekonda	Rajasthan Gum Pvt. Ltd.	31-Mar-11	0.44%	24.06%		
	Kudrekonda	Ramesh Kumar Hanjerimal Rathod	31-Mar-11	1.97%	30.27%		
	Kudrekonda	Sterling Agro Industries	31-Mar-11	0.44%	25.26%		
	Sindhigere	Avon Cycles Ltd.	31-Mar-11	0.28%	25.82%		
	Sindhigere	Gupta Coalfields and Washeries Ltd	31-Mar-11	0.30%	26.93%		
	Sindhigere	KUMINEX MINARALS	31-Mar-11	0.32%	23.44%		
	Sindhigere	Malaxmi Wind Power	31-Mar-11	0.39%	26.25%		
	Sindhigere	SVE Castings Private Limited	31-Mar-11	0.31%	21.14%		
	11-12	Hassan	Hindustan Zinc Limited	21-May-11	-		
Kudrekonda		Srinivasa Hatcheries Limited	25-May-11	-	28.13%		
Kudrekonda		Srinivasa Hatcheries Limited	17-Jun-11	-	25.26%		
Sindhigere		Orient Abrasives Ltd.	27-Jun-11	-	24.29%		
Kudrekonda		KHANNA INDUSTRIAL PIPES PVT. LTD.	14-Jul-11	-	29.71%		
Kudrekonda		Sterling Agro Industries	14-Jul-11	-	22.41%		
Kudrekonda		Mantri Homes	3-Aug-11	-	29.09%		
Kudrekonda		Tirupati Microtech Pvt. Ltd.	3-Aug-11	-	20.95%		
Sindhigere		KRBL Limited	8-Aug-11	-	21.73%		
Kudrekonda		Indus Trust	26-Sep-11	-	22.67%		
Kudrekonda		Beta Winofarm Pvt. Ltd.	29-Sep-11	-	16.58%		
Sindhigere		KRBL Limited	29-Sep-11	-	10.40%		
Sindhigere		Rajasthan Gum Pvt. Ltd.	29-Sep-11	-	16.34%		
Sindhigere		Sree Minerals	29-Sep-11	-	16.03%		
Sindhigere		Rajasthan Gum Pvt. Ltd.	30-Sep-11	-	14.30%		
Sindhigere		Ruchi Soya Industries Ltd.	30-Sep-11	-	11.24%		
Sindhigere		Agrawal Minerals (Goa) Pvt. Ltd.	27-Feb-12	-	15.25%		
Hassan		GAIL (INDIA) Ltd. Bangalore	2-Mar-12	-	8.76%		
Hassan		Pearlite Liners Pvt. Ltd.	2-Mar-12	-	11.15%		
Kudrekonda		GAIL (INDIA) Ltd. Bangalore	29-Mar-12	-	1.03%		
Hassan	Arvind V. Joshi & Co	31-Mar-12	-	1.14%			
Kudrekonda	Giriraj Enterprises	31-Mar-12	-	1.20%			
Kudrekonda	Rajasthan Gum Pvt. Ltd.	31-Mar-12	-	0.61%			
total commissioned			229.75				