INDIAN WIND POWER ASSOCIATION
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WINDPRO

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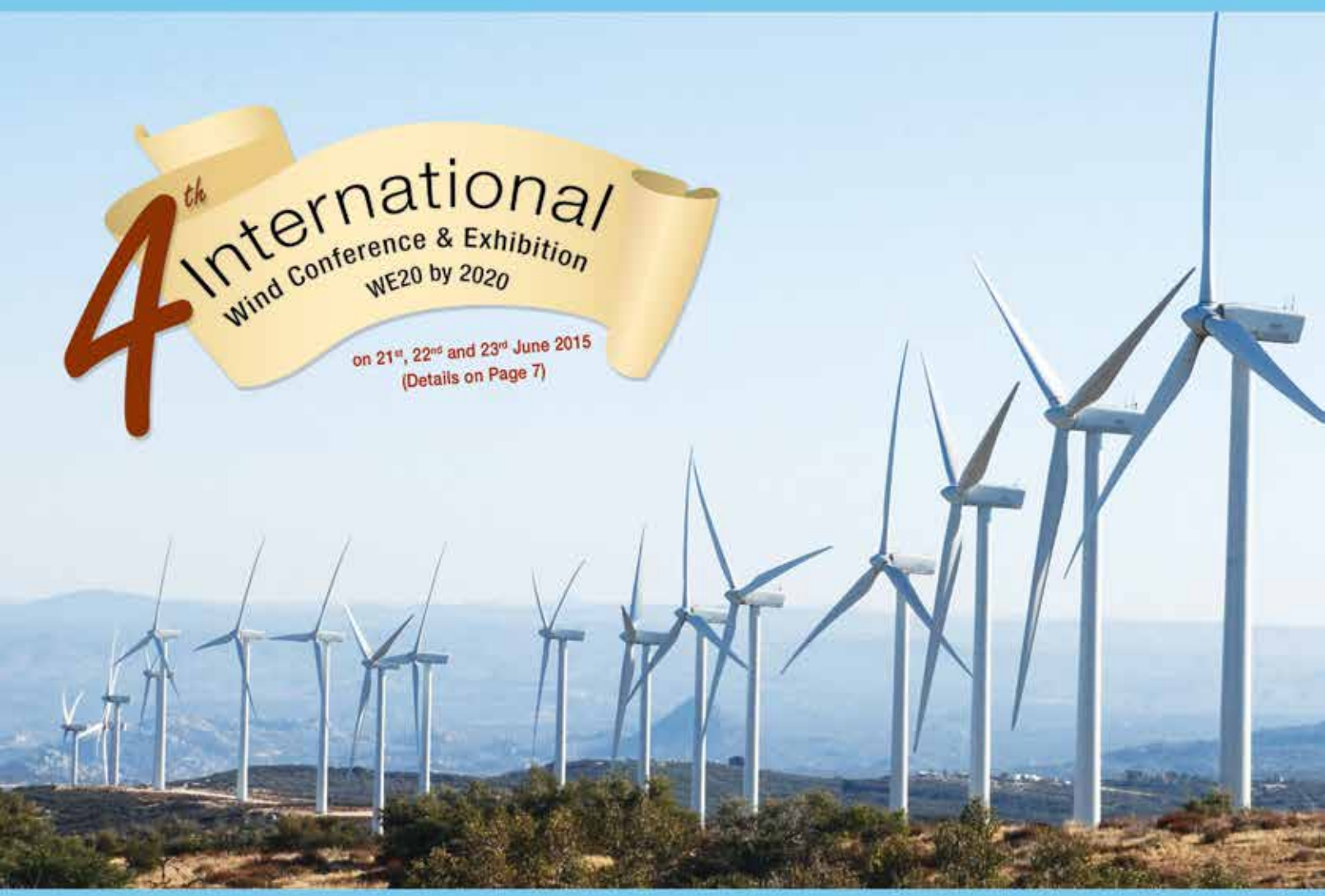

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From the Chairman's Desk

Dear Friends

The activities in the month of May were as follows:

1. **4th International Wind Conference & Exhibition organized by IWPA and WWEA:** Members are requested to register for their participation and attend the Exhibition cum Conference and make it a grand success. Please also refer to Circular No. 148 dated May 27, 2015 issued on this subject. Let us rally in large numbers at the Conference and express our solidarity to the policy makers in the country who have been invited as Chief Guest and Speakers. The Delegate Registration could be done on-line by visiting our web-site www.windpro.org. We also appeal to members to help National Office in getting sponsorship or setting stall holders for the Exhibition.

2. **Annual General Meeting of IWPA to be held on June 21, 2015 at CODISSIA Trade Fair Complex at Coimbatore:** The notice for convening the AGM has already been sent to all the members. Please make it convenient to attend the AGM.

3. **Update on Forecasting Project by NIWE:** Meters have been fitted in five Sub Stations and data collection is going on in full swing in the remaining SS. The work in all the eighteen 10(1) SS is expected to be completed by June 3rd and the work of fitting meters in the remaining SS is expected to be completed by June end. We have paid upfront for the meters,modems,servers and also paid 50% of charges to NIWE for Forecasting services

4. **Task Force Meeting on May 27, 2015:** A Task Force constituted by TANGEDCO for the specific purpose of evacuation of Wind Energy with representatives of IWPA, IWTMA,TASMA and SIMA was convened on May 27, 2015 at TANGEDCO. The Director (Operations) TANGEDCO chaired the meeting. The DG, NIWE who was also present had briefed the meeting regarding the progress of the Project as well as he gave a demo of the forecasting. It was indeed interesting for SLDC grid managers to see that the forecasts were quite on the mark in response to a query posed by the Director Operations. Everyone present were

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glad to see that the Director Operation & his engineers were quite happy with the Forecast.

5. **The start of the current Wind Season:** I am happy to inform the members that though the wind season has set in a little late on 19th May, the generation has picked up in the last few days. Representatives of IWPA had expressed their concern over the long hours of back down by TANGEDCO in a few areas. The Director Operations assured the members present that he spends quite a lot of time at the Control Room to ensure that maximum energy is absorbed. He further explained that once this Forecasting Project by NIWE is through it will give the Grid Operator better visibility and thus enable them to improve evacuation to the maximum possible extent.

6. **National Council Meeting and Investors Meet of IWPA Rajasthan held at Jaipur on May 02, 2015:** The Sixth National Council Meeting was convened at Jaipur on May 02, 2015. I am glad to inform that the incident of theft has been completely curtailed thanks to the efforts of the IWPA State Office Bearers and members of Rajasthan.

7. **Repowering study has been completed and an interim report has been submitted by the Consultants to MNRE.:** The study by the Consultants have been completed and an interim report has been submitted to the MNRE. We have requested the key persons involved in preparing the Report to deliver a talk at our Conference on June 22, 2015 and they have confirmed their participation

8. **Amendment to the Electricity Act 2003:** We understand that the recommendations of the amendments to the Electricity Act is now with the Select Committee for its approval. IWPA has already given its inputs in that regard.

9. **Rajasthan keen to adopt the Tamil Nadu model of Forecasting mechanism:** It is heartening to note that Rajasthan Government is impressed with the Forecasting Project which is underway at Tamil Nadu. The State Government officials have requested IWPA to make a presentation at Jaipur on June 04, 2015 regarding the Tamil Nadu project which they are keen to replicate.

10. **Renewal of IWPA Annual Subscription for 2015-16:** Our National Office has despatched the Invoices to all our members for the renewal of the Annual Subscription for 2015-16. I request all members to expedite the payment. Members may please note that as the AGM is scheduled on June 21, 2015 there should be no dues to the Association if they want to exercise their voting right.

11. **Membership Information Sheet (MIS):** We will be happy to receive the MIS from all the members early. Members Data Sheet which can be downloaded from the Association's website at www.windpro.org.

Prof. Dr. K Kasthurirangaian
Chairman

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Phone : 91-422-6585908, 6586908
Fax : 91-422-2248408
E-mail : office@rsmautokast.com

Congratulations ! Best Wishes !!

May 22, 2015

Madam Selvi J. Jayalalithaa,
Hon'ble Chief Minister,
Government of Tamil Nadu
Chennai – 600 009

Respected Madam,

IWPA the Association of Wind Power Producers in Tamil Nadu is glad to welcome you back as Chief Minister.

We recall with gratitude that it was you **Chief Minister Madam** on 27th May 2014 removed all power cut and ordered TANGEDCO to evacuate Wind Power to the maximum. In way of carrying out your orders, TANGEDCO evacuated daily 70 - 80 Million units of Wind Power.

As if to greet **Madam Selvi J. Jayalalithaa as Chief Minister,** South Westerly winds are blowing good for all the 24 hours from morning of 19th May 2015. At the point of writing this letter (3 PM) good winds at 8 M / Sec continue to blowing hard.

We look forward for our Chief Minister **Madam Selvi J. Jayalalithaa** to declare removal of Power cut once again and order TNEB to evacuate the maximum Wind Power which is cheap and pollution free. (if so necessary, TNEB may reduce thermal generation to desirable low)

May all good things happen once again under your regime!

With best wishes & regards,

For Indian Wind Power Association

Prof. Dr. K Kasthurirangaian
Chairman

Indian Wind Power Association
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INDIAN WIND POWER ASSOCIATION
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Points for NIWE meeting on 13.5.2015 from IWPA Chairman

1. I wish to thank Government of India & Government of Tamil Nadu for efforts for better evacuation of Wind Energy by requesting NIWE to take up forecast of wind energy for the whole State of TN.

2. I wish to personally thank Ms. Varsha Joshi, JS, MNRE & State Energy Secretary, Mr. Rajesh Lokhoni & Dr.Sai Kumar, Chairman, TANGEDCO for spearheading the project.

3. Micro Pilot version of Wind Energy forecasting is launched today. According to NIWE & Dr. Gomathynayagam, the forecasting exercise in the State of N has been progressing rather well and expected to be completed in time for the ensuing wind Season.

4. On behalf of the Wind Power generators of TN, I now request TANGEDCO to take the leadership in utilizing the forecasting data from NIWE to schedule the maximum of wind energy available for use in TN.

5. For the same to happen, we request the Government of Tamil Nadu & TANGEDCO to suitably take up annual maintenance of thermal generators in windy Season and run their other thermal to the technical minimum.

6. With the availability of wind forecast data, the planning of thermal plant as suggested above will also help in saving expensive Coal & Water which are both scarce in our State of TN.

7. On the part of Central Government, I request Ms. Varsha Joshi, JS, MNRE to coordinate with MOP requesting taking for maintenance of NLC thermal generators for annual maintenance.

8. To explore jointly with Tangedco on the possibility of swaping surplus power if any that might occur incidentally.

9. Personally from my years of experience I am confident that the effective utilization of Forecasting & Scheduling will benefit as follows:-

   a. It will directly improve the balance sheet of TANGEDCO as wind power is cheaper.

   b. TN will be with par with Countries like Denmark, Spain & Germany in the usage of Renewable Power and once evacuation improves in TN, TN will become a favourite destination for investments and there by employment.

   c. This TN project model for managing Renewable Power evacuation will become a benchmark for Renewable Power penetration for the other States in the Country and thereby help achieve our Union Government's National target of 165 GW of Renewables.

Thank you for the opportunity.

With Regards,

Prof. Dr. K Kasthurirangaian
Chairman

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4th International Wind Conference & Exhibition

WE20 by 2020

on 21st, 22nd and 23rd June 2015

- International Conference and Exhibition **(WE20 by 2020)**, 2015 organized by IWPA and WWEA at CODISSIA Hall, Coimbatore
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- 50,000 visitors for Exhibition
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- For online registration please visit our our **Website : www.windpro.org**

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: T A N G E D C O :

From

Er. A. Subramanian, B.E., M.I.E.,
Chief Engineer,
Non Conventional Energy Sources,
TANGEDCO
144, Anna Salai,
Chennai - 600 002.

To

The Superintending Engineer/Tirunelveli EDC
The Superintending Engineer/Tuticorin EDC
The Superintending Engineer/Kanyakumari EDC
The Superintending Engineer/Ramnad EDC
The Superintending Engineer/Udumalpet EDC
The Superintending Engineer/Dindigul EDC
The Superintending Engineer/Tirupur EDC
The Superintending Engineer/Theni EDC
The Superintending Engineer/Coimbatore South EDC.

Lr.No.CE/NCES/EE/WPP/AEE2/F. REMC/D.961/15, dt:16.05.2015

Sir,

Sub: NCES – Forecasting of wind energy for scheduling and effective grid management – Service offered by National Institute of Wind Energy (NIWE – Formerly C-WET) – Wind Data to be furnished to NIWE – instruction issued - Reg.

*****

Ref: Lr.No.CE/NCES/EE/WPP/AEE2/F. REMC/D…/15, dt:..04.2015.

The instruction has already been issued vide reference above, to prepare wind data to be given to National Institute of Wind Energy (NIWE – Formerly C-WET) to conduct a study on forecasting of wind energy for scheduling and effective grid management at Tamil Nadu.

Now CMD/TANGEDCO has approved to furnish the data to National Institute of Wind Energy.

Hence all the Superintending Engineer/Generating End EDCs are requested to instruct your Substation AE/AEEs to furnish the data to the representatives of NIWE when they approach the Substation AE/AEE for data without any lapse, so as to conduct forecasting during this wind season itself.

Yours faithfully,

Sd/- dt:15.05.2015

CHIEF ENGINEER/NCES

Copy to National Institute of Wind Energy, Chennai
Copy to Indian Wind Power Association, Chennai
Copy to the Superintending Engineer/NCES/Tirunelveli & Udumalpet to coordinate with SE/EDCs.

IWPA - Rajasthan State Council - Minutes of AGM & Investors Meet

held at Hotel Leisure Inn Grand Chanakya, M.I Road, Jaipur

1. Members Attended

35 members attended the meeting.

2. Welcoming the Members

Mr. Chandra Shekhar Khunteta, Honorary Secretary, IWPA, Rajasthan State Council welcomed the members present and introduced the invited guests. He submitted a report on the activities and the achievements of the IWPA, RSC. He also mentioned the issues being pursued by the Association. He appealed to the invited guests to jointly work and support each other by sharing information and assisting each other which will help in the development of the wind energy in the Rajasthan State.

3. Address by the Chairman, IWPA

Prof. Dr. K Kasthoorirangaian, Chairman, IWPA welcomed the Chief Guest Shri D.L Jakhar, C.E, RDPPC (Rajasthan Discoms Power Procurement Centre), and the members present. He said that Rajasthan has a good name due to people like Mr. Jakhar in key positions. Unless policy and payments are good, investors will not be attracted.

Solar power is to be developed in a big way at Sahara and it is going to be the Power House of Europe. Similarly, Rajasthan can be the Power House of India by developing Renewable Energy. Wind is not constant in nature. We cannot change wind. Hence, we have to design a system suitable to wind. Tamil Nadu has no Forecasting & Scheduling system. Instead of putting forecasting & scheduling in each wind energy generators, measuring equipments can be installed in each of 134 sub stations and consolidated figure can go to SLDC. This is a novel scheme. This can be followed in Rajasthan also. Initially, there may be errors, but the system will improve as the system proceeds.

4. Election of the Office Bearers and Council Members

The Election results of the Council Members for Rajasthan State Council were announced by Shri S Gnanasekharan, Secretary General, IWPA. The names of the candidates who were elected are given below:

Sl. No.	Name	Company	Designation	Post in IWPA RSC
1	Mr. Manoj Kumar Singh	M/s.India Power Corporation Ltd.	Manager – Renewable Business	Executive Member
2	Mr. Ashok Agarwal	M/s.Shree Ram Group	Chairman	Executive Member
3	Mr. Suresh Agarwal	M/s.National Engineering Ind. Ltd.	G.M (Commercial & Legal)	Executive Member
4	Mr. Gopal Ozha	M/s.Sterling Agro Ind.Ltd.	Manager	Executive Member
5	Mr. Krishnavtar Goyal	M/s.Hindustan Zinc Ltd.	Head – Renewable Energy	Executive Member

All the above State Council members will hold office for the period of three years. Chairman & others welcomed the selected members & appealed to the invitees to be the part of Word's biggest association to strengthen the Wind Energy sector in India.

The full complement of the RSC Office Bearers and Executive Members are as follows:

Sl.No.	Name	Company	Designation	Post in IWPA RSC
1	Mr. Manek Talera	Oswal Cables Pvt. Ltd.	Chairman	President
2	Mr. Rajendra Vyas	Enercon Wind Farms (Jaiselmer) Pvt. Ltd	Corporate Advisor	Vide President
3	Mr. C.S Khunteta	Indocot	Director	Secretary
4	Mr. Anil Kumar Saboo	Elektrolites (Power) Pvt. Ltd.	Director	Treasurer
5	Mr. Rahul Singhvi	Chemical & Mineral Industries (P) Ltd.	Director	Executive Member
6	Mr. Girish Agarwal	Sankalp International	Partner	Executive Member
7	Mr. Nitin Goyal	Sulzon Energy Ltd.	AGM-Business Development	Executive Member
8	Sanjay Mathur	Dangayach Group of Hotels	Finance Controller	Executive Member
9	Pramod Singh Chouhan	Inox Renewables Ltd.	Sr.Manager (Business Crdntn)	Executive Member
10	M.K Sethi	Rishabh Construction	Director	Executive Member
11	Mr. Manoj Kumar Singh	M/s.India Power Corporation Ltd.	Manager – Renewable Business	Executive Member
12	Mr.Ashok Agarwal	M/s.Shree Ram Group	Chairman	Executive Member
13	Mr. Suresh Agarwal	M/s.National Engineering Ind. Ltd.	G.M (Commercial & Legal)	Executive Member
14	Mr.Gopal Ozha	M/s.Sterling Agro Ind.Ltd.	Manager	Executive Member
15	Mr. Krishnavtar Goyal	M/s.Hindustan Zinc Ltd.	Head – Renewable Energy	Executive Member

5. Address by the Chief Guest

Sh. D.L Jakhar, CE, RDPPC, Jaipur Discom thanked the members present and share his experience in wind energy. He praised the role of Indian Wind Power association is taking up the issues on behalf of investors & told IWPA can play a important role in coordinating & selecting project in renewable energy industry. He also described the challenges faced by Discom these days. He assured the investors to maximum help from state government.

He informed that Tamil Nadu is a power deficit state and Rajasthan is a power surplus state. But PLF at Tamil Nadu is high. He added that Rajasthan has two main problems:

1) Transmission Problem, 2) Forecasting and Scheduling. The grid should neither be overloaded nor under loaded. If you are able to forecast and schedule, load shedding can be minimized. Proper scheduling is very important.

6. Open House Discussion

Delay in payments, LPS, Improvement of Evacuation System & forced breakdown issue etc. are few concerns.

Sh.D.L Jakhar, briefed that electricity board are trying to release the payment on timely, and also trying to release the LPS amount. HE appealed to the members to support the utility board also to resolve this issue. For the other matter he suggests the members to get in touch with concern authorities / division.

7. Sri. S.K Surana, MD, Compucom Software Ltd., Member, Rajasthan State Council proposed the Vote of Thanks.

Manak Talera
President

Chandra Shekhar Khunteta
Hon.Secretary

Status of Wind Power Projects Commissioned upto March 2015 - Rajasthan

S.No.	Financial Year	Total Capacity of Wind Power Projects Commissioned (MW)	Cummulative Capacity Commissioned (MW)
1	1999-2000	2.000	2.000
2	2000-2001	7.110	9.110
3	2001-2002	8.380	17.490
4	2002-2003	43.990	61.480
5	2003-2004	114.400	175.880
6	2004-2005	103.740	279.620
7	2005-2006	73.275	352.895
8	2006-2007	111.750	464.645
9	2007-2008	70.450	535.095
10	2008-2009	199.600	734.695
11	2009-2010	350.000	1084.695
12	2010-2011	436.700	1521.395
13	2011-2012	545.650	2067.045
14	2012-2013	632.000	2699.045
15	2013-2014	98.800	2797.845
16	2014-2015	523.500	3321.345
	Total	**3321.345**	

Prof. Dr. K Kasthurirangaian
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Providing LVRT facility for Wind Mills installed in TN

May 15, 2015

Chief Engineer - NCES

TANGEDCO

Chennai – 600 002

Dear Sir,

We bring to your kind notice that SRLDC has filed a petition in CERC and the first meeting took place on 12th May 2015.

IWPA are also a party submitting our views thereon at CERC.

Any discussions on this subject elsewhere would be subjudice.

We suggest that let us all wait for CERC giving a verdict on the petition on hand.

Thanking you in anticipation,

For Indian Wind Power Association

Prof. Dr. K Kasthurirangaian

Chairman

Prof. Dr. K Kasthurirangaian
Chairman

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Comments of IWPA for filing the reply regarding LVRT case in CERC

May 18, 2015

Dear Sir,

Primarily IWPA is not against the provision of LVRT feature in the Wind Energy Generators (WEG). IWPA fully supports the initiatives of SRLDC to maintain grid discipline and security. It is also informed that LVRT provision is made available in all new WEGs as per CEA's Grid Connectivity Standards applicability on or after 15-4-2014.

As per the Para (6) of SRLDC's submission the primary fault lies elsewhere which are to be looked into seriously whether it could be avoided or prevented. LVRT is the cure for the fault in the system. We should also focus our attention on how these kind of fault could be prevented. Prevention is better than cure and prevention is cost effective than LVRT, the cure

As it is evident that TANGEDCO does not have real time wind generation facility, it is not known how loss of wind generation was quantified in para (6)

Para (8) states that LVRT boosts the terminal voltage of the point of connection of WEG which is to be studied by a Technical Group for which IWPA will take part and extend full support and cooperation.

New WEGs connected after 15-4-2014 are being provided with LVRT features as per para (9).

Para (10) For all the old WEGs there are serious concerns expressed by the Wind Turbine manufacturers regarding the technical and techno-commercial limitations in retrofitting the LVRT features.

Para 13. CERC is coming out with communication standards and this will solve the real time generation data required for the operation.

Para 14. Regarding Forecasting and Scheduling, National Institute of Wind Energy (Formerly CWET) has undertaken the task of Wind Energy Forecasting for the entire state of Tamil Nadu and is expected to in place during this wind season.

We would also request CERC to come out with a standard for Power Quality for the Utility especially for the Voltage Quality, as voltage quality affects the operation of the WEGs. We shall support and cooperate for this activity from our side. We again state that Prevention is better than Cure as prevention is cost effective and less damaging the entire system.

We would require one more chance to submit our comments once TANTRANSCO/TANGEDCO files their contention.

Thanking you & Warm Regards,

For Indian Wind Power Association

Prof. Dr. K. Kasthurirangaian
Chairman

Prof. Dr. K Kasthurirangaian
Chairman

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Phone : 91-422-6585908, 6586908
Fax : 91-422-2248408
E-mail : office@rsmautokast.com

Task Force Meeting on 15th May 2015

May 15, 2015

Chief Engineer - NCES
TANGEDCO
Chennai – 600 002

Dear Sir,

We thank you for convening the Task Force Meeting to discuss LVRT & other issues.

We take this opportunity to request you to kindly send us the copy of the minutes for the earlier Task Force Meeting conducted on 24.2.2015.

We would appreciate the conduct of Task Force Meeting every month to enable us to discuss taking forward the new situation arising out of NIWE providing forecast of Wind Energy for all the Wind Mills in TN on behalf of IWPA and issues related thereon.

Thanking you in anticipation,

For Indian Wind Power Association

Prof. Dr. K Kasthurirangaian
Chairman

:TANGEDCO:

From

Er. A. Subramanian, B.E., M.I.E.,
Chief Engineer,
Non Conventional Energy Sources,
TANGEDCO
144, Anna Salai,
Chennai - 600 002.

To

The Director/General,
National Institute of Wind Energy,
657/1A2, Vellacherry –Tambaram Main Road,
Pallikaranai,
Chennai – 600 100.

Lr.No.CE/NCES/EE/WPP/AEE2/F. REMC/D.964/15, dt:16.05.2015

Sir,

Sub: NCES – Forecasting of wind energy for scheduling and effective grid management – Provision of ABT meters in each of the Wind Pass in the 1st phase - Reg.

Ref: Lr.No.CE/NCES/EE/WPP/AEE2/F. REMC/D.961/15, dt:15.05.2015.

*****

As per the agreed terms, the instruction has already been issued vide reference above, to furnish the wind data to the representatives of NIWE for forecasting of wind energy in this wind season.

As the forecasted output of each wind pass to be seen immediately in this wind season, and as of now only 5 No. ABT meters available, it is necessary to provide ABT in each of the Wind Pass in Tirunelveli and Udumalpet area in the 1st phase. If balance meters are procured in a phased manner (or) at bulk, the same may fixed evenly at each wind pass.

Hence it may be programmed to provide the 5 No. ABT meters in each of the Wind Pass in Tirunelveli and Udumalpet area in the 1st phase, so as to see the forecasting in this wind season.

Yours faithfully,

Sd/- dt:16.05.2015

CHIEF ENGINEER/NCES

Copy to Indian Wind Power Association, Chennai

Copy to the Superintending Engineer/NCES/Tirunelveli & Udumalpet are requested to provide the ABT meters as programmed with MRT wing.

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Analysis of Supreme Court Judgment on Applicability of Renewable Purchase Obligations

On May 13, 2015 the Supreme Court pronounced a landmark judgment on the applicability of Renewable Purchase Obligations (RPO) regulations. The case in question is Hindustan Zinc vs Rajasthan Electricity Regulatory Commission (RERC).

Background

In August 2012, the Rajasthan High Court had dismissed an appeal by Hindustan Zinc Ltd., Ambuja Cements Ltd., Grasim Industries Ltd. and 14 other companies that challenged RPO regulations enacted by the state regulator (Rajasthan Electricity Regulatory Commission; RERC).

The key points contested by captive (CPP) and open access (OA) users in the petition were:

- RERC did not have the authority to pass the order of RPO and impose surcharge (penalty) as CPP and OA were completely de-licensed activities under the Electricity Act 2003 (EA 2003)
- EA 2003 only allows RPO on the 'total consumption in the area of the distribution licensee' and therefore intends to apply RPO on distribution licensees only

The High Court rejected the petition stating:

- The word 'total consumption' has been used in the EA 2003, and should be considered as total consumption in the area of distribution licensee in all modes. Total consumption has to be seen by consumers of distribution licensee, captive power plants and on supply through distribution licensee. It cannot be inferred by mention of area of distribution licensee that only consumers of the distribution licensee are included.
- The objective behind imposition of RE obligation is in the greater public interest. The constitution casts duty on the Regulatory Commission to protect and improve the natural environment. This duty can be imposed on CPP and OA as well.

The above order of the Rajasthan High Court was challenged in the Supreme Court.

Order of the Supreme Court

In its order, the Supreme court dismissed the appeal of the petitioners, and upheld the RPO regulations made by RERC.

The court stated several important points in its judgment:

- Imposing RPO is desirable in the larger public interest. The court observed that:

  "…The Right to live with healthy life guaranteed under Article 21 of the Constitution of India, it has also been interpreted by this Court. It includes the Right to live in a pollution free environment and laid down the law in a catena of cases…"

  and

  "The impugned Regulations fall within the four corners of the Act of 2003 as well as Electricity Policy, 2005. The object of imposing RE Obligation is protection of environment and preventing pollution by utilising Renewable Energy Sources as much as possible in larger public interest."

  And further:

  "The Coal dominates the Thermal Power Generation which results in Green House Gases resulting in global warming. The said facts were brought to our notice that the same would certainly justify the case of the RERC in framing the impugned Regulation to achieve the object of the Act and the Constitution by imposing RE obligation on the captive gencos."

- RPO applicability on captive and open access consumers is well within the ambit of the Electricity Act 2003.

  "The High Court has considered the submissions of the appellants and has rightly rejected the same on the ground that the RE obligation imposed on

the captive gencos under the impugned Regulations is neither ultra vires nor violative of the provisions of the Act of 2003 and cannot in any manner be regarded as a restriction on the fundamental rights guaranteed to the appellants under the Constitution."

- Cost of fulfilling the obligation cannot be held above the larger public interest.

"The purchase of nominal quantum of energy from renewable resources cannot adversely affect the cost effectiveness of the Captive Power Plant. Moreover, the object being reduction of pollution by promoting renewable source of energy, larger public interest must prevail over the interest of the industry…."

As a result of the above findings, the court dismissed the appeal.

"Upon consideration of the rival submissions by the well - reasoned order, the High Court has rightly upheld the validity of the impugned Regulation and we do not find any reason to interfere with the impugned judgment. All the appeals are dismissed as the same are devoid of merit."

Implications of the order

This order is likely to have far-reaching implications on the enforcement of RPO *regulations.*

- Stay by HC in various states may become redundant: Till date, the *enforcement of RPO regulations has been lax due to various reasons. One of the reasons has been the stay granted by various High Courts like in the case of Gujarat (recently vacated), MP and Tamil Nadu, among others. With the Supreme Court now ruling in favour of imposition of RPO, the existing stay may become redundant.*
- Enable stronger enforcement: Further, the order is likely to provide support *to the state electricity regulators to impose RPO regulations more forcefully and effectively.*

Disclaimer

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Over 26,000 MW

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Status of Legal Cases Initiated by the Association on behalf of its Members

Position as on April 29, 2015

Tamil Nadu Issues

Sl. No.	Judicial Forum with Period of Filing	Subject	Status
1.	Supreme Court; February 19, 2008 Civil Appeal No. 1471 & 72 of 2208 **Appellant** : TNEB **Respondent** : IWPA, MNRE, et al	**Time value of money:** TNERC in its order No. 3 dated May 15, 2006 regarding tariff fixation had fixed rate applicable for 20 years flat. IWPA has appealed that freezing the rate for 20 years without providing for inflation would adversely affect the return on investment of members.	A Counter has already been filed on January 10, 2012. The case has not been listed for hearing as on date.
2.	Supreme Court; April 10, 2013 SLP No. 15421 of 2013 **Appellant** : IWPA **Respondent** : TANGEDCO, CE NCES, TNERC	**Levy of O & M charges:** In 2011 TANGEDCO had levied O & M charges of Rs. 1.6 lakhs per MW with an annual increase of 5%. IWPA has appealed for withdrawal of these charges	The Division Bench of the High Court of Madras had dismissed our appeal. Consequently IWPA has filed an SLP before the Supreme Court. The Supreme Court has ordered notice in the matter. Counter has been filed by TANGEDCO recently. Hearing is yet to take place.
3.	Supreme Court; November 2013 Civil Appeal No. 9678 of 2013 **Appellant** : IWPA **Respondent** : TNERC, TANGEDCO, TANTRANSCO	**Wind tariff order (No. 6/2012)** TNERC had issued a tariff order dated July 31, 2012 wherein several charges were enhanced and a few additional charges were introduced w.e.f. August 01, 2012. IWPA filed a petition with APTEL praying for reduction and rationalising the charges.	APTEL had issued an order directing the TNERC to rework the charges. But TANGEDCO had appealed against the APTEL's order with the Supreme Court. The case was heard by the Supreme Court on January 6, 2014 and IWPA has been directed to file a counter. Counter filed by IWPA. Hearing to follow.
4.	High Court of Madras; July 25, 2013 WP No. 21166 / 13 **Appellant** : IWPA **Respondent** : Union of India and others	**Implementation of RRF Scheme:** WEGs to Forecast and Schedule wind energy from July 15, 2013 up to an accuracy of 70% for each fifteen minute slot. Deviation thereof was subject to penalty (UI charges) for non-adherence to intimated data.	CERC had requested IWPA and other associations to withdraw the case since the commercial penalty for the deviation under RRF Scheme was withdrawn six months after it was introduced. Our Legal Counsel has advised that we should first ensure that none of our members are affected during the six months period when this RRF commercial penalty system was in force. Hearings continue.

Sl. No.	Judicial Forum with Period of Filing	Subject	Status
5.	High Court of Madras; 24th March 2015 W.P. No.7956 of 2015 **Appellant** : IWPA **Respondent** : TANGEDCO	**Scheduling & System Operation Charges** Levy of Scheduling & System Operation Charges for sale of energy to TNEB	Levy stayed.
6.	TNERC; April 2012 MP No. 14 of 2012 **Appellant** : IWPA, Tata Power Co. Ltd. **Respondent** : Union of India and others	**Must run status:** Association had filed a petition to TNERC to issue a direction bestowing "must run" status to wind energy.	TNERC wanted information regarding hour-wise back down. The required data was submitted by IWPA to TNERC during the hearing on April 17, 2014.Written submissions sought by TNERC which has since been submitted. Orders reserved.
7.	TNERC MP No. 22 of 2014 (High Court of Madras; August 2013 22420 of 2013) **Appellant** : IWPA **Respondent** : Union of India and others	**Bestow "Must Run" status to wind mills:** IWPA had appealed to bestow "Must Run" status to all wind mills.	Initially the case was filed at Madras High Court who have since remanded the matter to TNERC with a direction to deliver a judgement within four weeks. TNERC had called for additional information regarding back down. Details were submitted on April 17, 2014. Written submissions sought by TNERC which has since been submitted. Orders reserved.
8.	TNERC MP No. 23 of 2014 (High Court of Madras; August 2013 22421 of 2013) **Appellant** : IWPA **Respondent** : Union of India and others	**Compensation for losses due to back-down:** Back down of wind energy up to 22 hours a day violate the "Must Run" status granted by Grid code. Therefore, IWPA had appealed for compensation for the losses accrued to members due to illegal enforcement of back-down	Initially the case was filed at Madras High Court who have since remanded the matter to TNERC with a direction to deliver a judgement within four weeks. TNERC has called for additional information regarding back down. Details were submitted on April 17, 2014. Written submissions sought by TNERC which has since been submitted. Orders reserved. (Please see remarks as at Sl. No. 6 above)
9.	TNERC; April 2012 MP No. 5 of 2012	**Extension of time for utilisation of banked units:** Association had requested for extension of additional three months' time for utilization of the surplus banked units or compensate the affected members at Rs. 12 per unit for the period 2011-12.	Data regarding unutilised banked units as on March 31, 2012 have been submitted. Further hearings to continue.

Sl. No.	Judicial Forum with Period of Filing	Subject	Status
10.	TNERC; February 2013 MP No. 6 of 2013	**Encashment of banked units:** Association had filed a petition requesting for encashment of surplus banked units as on March 31, 2013 @ Rs. 5.50 per unit	Data regarding unutilised banked units as on March 31, 2013 have been submitted. Further hearings to continue.
11.	TNERC; April 2012 MP No. 4 of 2012	**Renewable power purchase obligation (RPO):** Association has requested for extension of time for fulfilment of RPO and also to give credit to the extent wind energy is generated.	Since a few private parties had filed a petition in the High Court of Madras on this subject, the Commission felt that we should await the High Court Judgement. Hearing took place on July 21, 2014. TNERC had directed TANGEDCO in 2012 to collect the required data from SLDC, Tamil Nadu and submit the same to the Commission. TNERC had directed SLDC to file submission within four weeks. They have submitted the data. Hearings to continue.
12.	TNERC; July 2013	**Interest on delayed payment:** IWPA had facilitated 65 individual members to file a petition for payment of interest on the delay in payment by the utility to the individual WEG	Incidentally an old case on this subject had come up for hearing on April 17, 2014 at the Supreme Court. The Supreme Court based on TANGEDCO's appeal issued a limited notice to IWPA for hearing on whether interest at 6% p.a. will be acceptable. IWPA has insisted on 12% p.a. and filed a counter with the Supreme Court. The next hearing is scheduled in May 2015.

Andhra Pradesh Issues

Sl. No.	Judicial Forum with period of Filing	Subject	Status
1.	TERC	Tariff	Yet to be admitted.

Karnataka Issues

Sl. No.	Judicial Forum with period of Filing	Subject	Status
1	APTEL Appeal No. 11 of 2014 & 1A No. 14 of 2014	**New Tariff Order:** The Association has filed an Appeal challenging the KERC Tariff order	APTEL directed KERC to reconsider the parameters. KERC had come up with an order of Rs. 4.50/- per unit.

Rajasthan Issues

Sl. No.	Judicial Forum with period of Filing	Subject	Status
1	RERC	Interest on delayed payment	Being heard

Maharashtra Issues

Sl. No.	Judicial Forum with period of Filing	Subject	Status
1	Appeal 210 of 2014 before APTEL	MERC order in Case No.93 of 2013 has been challenged before APTEL stating the law do not provide for deciding on matters merely because certain majority number of developers agrees for certain matters even though the matters are not in accordance with provisions of Electricity Act or Regulations made there under or earlier orders issued.	Next hearing 06.05.2015
2	IWPA MSC petition 9 of 2015 filed for non compliance of MERC Order 72 of 2014 dated 20.08.2014	MSEDCL has hosted on the website revised procedure for open access to be effective from April 1, 2014. The said procedure has been held to be at total variance from MERC (Distribution Open Access) Regulations, 2010 and also the practice they have been following till March 31, 2014. MERC in their order of 20.08.2014 directed MSEDCL to withdraw their revised procedure for all applications for open access received prior to 25.06.2014 being the date on which new Open Access Regulations, 2014 have come into force.	The matter heard on 10.02.2015 and finally on 23.03.2015 and order reserved. Order still awaited. It is pertinent to note post the aforesaid hearing, Hon'ble APTEL on an identical issue of multi sources supplying power to single consumer in case of solar in Appeal No.169 of 2014 has issued an Order on 22.04.2015 negating the view points of MSEDCL and MERC.
3	Writ Petition No.2318 of 2014 before Bombay High Court	The Distribution Open Access Regulations, 2014 issued by MERC is having following major shortcomings as per IWPA MSC • No public hearing was held before issuance of Regulations • Draft Regulations placed for public comments in 2011 and 2013 never contained the contentious clauses incorporated in new Regulations of 2014. • Restricts the availability of open access to consumers to purchase power from multiple generators. • Calls for minimum power available at all times to be 1 MW which is not feasible in respect of infirm wind power. • Compulsory reduction in contract demand to the extent of plant load factor assumed in the new tariff regulations of MERC. • Submitting copy of PPA with open access consumer while applying for open access approval to the Distribution Licensee.	As most of the clauses in the new regulation is not in accordance with provisions of EA, 2003 especially section 2(47), section 10(2), section 42, section 49, section 86, etc. A writ petition has been filed in the Hon'ble High Court of Bombay. Tata Power and Reliance Energy have joined the fray as affected Distribution Licensees. Indian Energy Exchange has filed a separate writ petition and the same is being heard independently. Also Wind World and Renewable Energy Forum, Kolhapur have filed separate petitions. In view of the above, the Petitioners and Respondents would now be all Wind Power Associations and Parties on one side as Petitioners and the three major Distribution Licensees and the Regulatory Commissions as Respondents. So far number of hearings at the admission stage itself have taken place since each respondent / petitioner has been entering the fray at different points of time. The next hearing is on 30.04.2015.

NATIONAL INSTITUTE OF WIND ENERGY (NIWE)

Ref. No.: NIWE/S&C/RLMM/2015-16/09

Date : 15.05.2015

To

All Concerned

Dear Sir,

Sub: Revised List of Models and Manufacturers of Wind Turbines - "ADDENDUM –II List" to "Main List dated 11.09.2014"

The **"ADDENDUM –II List" to "Main List dated 11.09.2014" of "Models and Manufacturers of wind turbines",** prepared as per MNRE guidelines No.66/53/2000-WE (PG) dated 23.10.2000 and MNRE letter No.71/90/2009-WE dated 21.12.2011, based on the information provided by wind turbine manufacturers, is enclosed.

Thanking you,

Yours faithfully,

For National Institute of Wind Energy

(A. Senthil Kumar)
Additional Director/Head,
Standards & Certification

Encl: As above

Sir,

Sub: Revised List of Models and Manufacturers of Wind Turbines - "ADDENDUM –II List" to "Main List dated 11.09.2014"

In continuation to the Revised List of Models and Manufacturers of wind turbines – "Main List dated 11-09-2014" and "Addendum – I List dated 09.01.2015", this "ADDENDUM – II List" is prepared and detailed below. The list of manufacturers has been drawn up with models of wind turbines of unit capacity 225kW and above that have obtained type approval / certificate from designated certification agencies, as per the information received from the manufacturers.

1. Table – A : List of wind turbine models possessing valid Type Approval / Certificate (This Table – A is in addition to the Table - A of "Main List dated 11.09.2014" and "Addendum –I List dated 09.01.2015")

Table – A: The wind turbine models possessing valid Type Approval / Certificate:

Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model / Rotor Dia (RD) (m) / Hub Height (HH) (m) / Tower Type	Capacity	*Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
1.	M/s. Gamesa Wind Turbines Private Limited No. 334, The Futura IT Park, Block - B, 8th Floor, Rajiv Gandhi Salai, Sholinganallur, Chennai – 600119 **Phone : 044-39242424** **Fax : 044-30060661**	Gamesa Innovation and Technology, S.L, Spain	G114 - 2.0MW IEC-IIIA HH80, 93 & 125m 50/60Hz RD: 114 m HH: 80/93/125 m Tower Type: Tubular Steel	2000 kW	Available (12.12.2019)	Yes (13.07.2015)
2.	M/s. GE India Industrial Private Limited Division: Wind Energy 601, 6th Old Madras Road, Floor, Tower B, RMZ Infinity, Bangalore – 560016 **Phone : 080- 40482451** **Fax : 080- 40482341**	GE Infrastructure Technology International, LLC, USA	GE 1.7-103, GE 50.2, HH 79.7 m, 50 Hz RD: 103 m HH: 79.7 m Tower Type: Tubular Steel	1700 kW	Available (29.09.2015)	Yes (31.03.2017)
3.	M/s. Global Wind Power Limited No. 15, Soundara Pandiyan Street, Ashok Nagar Chennai - 600083 **Phone : 044-39182609** **Fax : 044-39182636**	Guangdong Ming Yang Wind Power Industry Group Co. Ltd., China	MingYang 1.5MW - 89 HH 80m IEC S RD: 89.3 m HH: 80 m Tower Type: Tubular Steel	1500 kW	Available (17.07.2015)	Yes (12.02.2018)
4.	M/s. Inox Wind Limited Inox Towers, Plot No.17 Sector-16-A, Noida, Uttar Pradesh-201301 **Phone : 0120-6149600** **Fax : 0120-6149610**	AMSC Austria GmbH, Austria	WT2000DF RD : 93.3 m HH : 80 m Tower Type: Tubular Steel	2000 kW	Available (01.03.2017)	Yes (23.06.2016)
5.	M/s. Kenersys India Private Limited Industry House, Survey No. 49 Mundhwa, Pune - 411036 **Phone : 020- 30473100** **Fax : 020- 30473133**	Kenersys GmbH, Germany	K110 RD: 109 m HH: 85/95 m Tower Type: Tubular Steel	2400 kW	Available (04.07.2018)	Yes (09.11.2017)

Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model / Rotor Dia (RD) (m) / Hub Height (HH) (m) / Tower Type	Capacity	*Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
			K110 P+ RD : 109 m HH : 85 m Tower Type: Tubular Steel	2625 kW	Available (10.04.2019)	
6.	M/s. Leitwind Shriram Manufacturing Limited No. D-17, Sipcot Industrial Complex, Gummidipoondi – 601201 Thiruvallur District, Tamil Nadu **Phone : 044-27926000** **Fax : 044-27924944**	WindFin B.V, The Netherlands (formerly known as Leitwind B.V)	Leitwind LTW77-1.5 MW RD : 76.6 m HH : 61/65/80 m Tower Type: For HH 61/65/80m - Tubular Steel & HH 80m-hybrid Tower (steel and concrete)	1500 kW	Available (18.09.2016)	Yes (12.01.2018)
			Leitwind LTW80-1.5 RD : 80.3 m HH : 80 m Tower Type: Tubular Steel	1500 kW	Available (08.03.2020)	
			Leitwind LTW80-1.8 RD : 80.3 m HH : 80 m Tower Type: Tubular Steel	1800 kW	Available (08.03.2020)	
			Leitwind LTW86-1.5MW RD : 86.4 m HH : 80 m Tower Type: Tubular Steel	1500 kW	Available (07.07.2018)	
			Leitwind LTW101-3.0 RD : 100.9 m HH : 93.5 m Tower Type: Tubular Steel	3000 kW	Available (07.12.2019)	

Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model / Rotor Dia (RD) (m) / Hub Height (HH) (m) / Tower Type	Capacity	*Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
7.	M/s. Nupower Technologies Private Limited 618, Maker Chambers V, Nariman Point, Mumbai – 400021 **Phone : 022-66325132** **Fax : 022-22875584**	W2E Wind to Energy GmbH, Germany	W2E-93/2.05 MW RD: 93.2 m HH: 85/98.2 m Tower Type: Tubular Steel	2050 kW	Available (02.05.2017)	Yes (02.02.2018)
			W2E-100/2.05 MW RD : 100.13 m HH : 98.2/117/141 m Tower Type: For HH 98.2 m – Tubular Steel & HH 117/141 m – Lattice tower	2050 kW	Available (24.04.2019)	
8.	M/s. Pioneer Wincon Private Limited 30/1A, Harrington Chambers, II Abdul Razaq 1 Floor, 'B' Block, st Chennai - 600015 Street, Saidapet, **Phone : 044-24314790** **Fax : 044-24314789**	None	Pioneer 250/29 RD : 29.6 m HH : 50 m Tower Type: Lattice	250 kW	Available (22.06.2016)	Yes (05.03.2018)
			Pioneer Wincon 750/49 RD : 49 m HH : 61.1 m Tower Type: Lattice	750 kW	Available (17.11.2015)	
9.	M/s. RRB Energy Limited 182/2, Bypass Road, Poonamallee, Chennai – 600056 **Phone : 044-26271111** **Fax : 044-26271114**	Technological co-operation with Vestas Wind Systems A/S, Denmark	V 39-500 kW with 47m Rotor diameter RD : 47 m HH : 50 m Tower Type: Tubular Steel & Lattice	500 kW	Available (03.04.2016)	Yes (14.12.2017)
		None	Pawanshakthi PS 1800 (HH 80m / 100m) RD : 82.4 m HH: 80 / 100 m Tower Type: Tubular Steel	1800 kW	Available (30.06.2015)	

Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model / Rotor Dia (RD) (m) / Hub Height (HH) (m) / Tower Type	Capacity	*Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
10.	M/s. Shriram EPC Limited 18/3, 4th Sigappiachi Building, Rukmani Lakshmipathi Salai, Floor, (Marshalls Road), Egmore, Chennai - 600008 **Phone : 44-49015678** **Fax : 044-49015655**	TTG Industries Limited	SEPC 250T 41.5 m Lattice Tower RD : 28.5 m HH : 41.5 m Tower Type: Lattice	250 kW	Available (02.12.2018)	Yes (08.04.2016)
			SEPC 250T 51.5 m Lattice Tower RD : 28.5 m HH : 51.5 m Tower Type: Lattice	250 kW	Available (29.05.2018)	
11.	M/s. Siva Windturbine India Private Limited 12/A, Kandampalayam, Perundurai, Erode - District Pin : 638052 **Phone : 04294- 220017** **Fax : 04294- 220137**	None	SIVA 250/50 RD : 30 m HH : 50 m Tower Type: Lattice	250 kW	Available (30.01.2016)	Yes (30.09.2017)
12.	M/s. Suzlon Energy Limited Tree Lounge, Level 0, Left wing, One Earth, Opp. Magarpatta City Hadapsar, Pune – 411028 **Phone : 020-67022000** **Fax : 020-67022200**	Suzlon Energy GmbH, Germany	Suzlon S82V3-1500kW RD : 82 m HH : 78 m Tower Type : Tubular Steel	1500 kW	Available (26.08.2016)	Yes (12.04.2018)
			Suzlon S88 V3A-2100kW RD : 88 m HH : 80 m Tower Type : Tubular Steel	2100 kW	Available (24.11.2015)	
			Suzlon S95 DFIG 2.1 MW RD : 95 m HH : 80/90/100 m Tower Type : Tubular steel	2100 kW	Available (08.09.2015)	

Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model / Rotor Dia (RD) (m) / Hub Height (HH) (m) / Tower Type	Capacity	*Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
			S97-HT DFIG 2.1MW RD :97 m HH : 120 m Tower Type: Hybrid tower (lattice tower 66m, adapter 4.29m and tubular tower 45.97m)	2100 kW	Available (23.07.2016)	
13.	M/s. Vestas Wind Technology India Private Limited 298, Rajiv Gandhi Salai, Shollinganallur, Chennai - 600119 **Phone : 044-24505100** **Fax : 044-24505101**	Vestas Wind Systems A/S, Denmark	Vestas V110-2 MW 50Hz VCS Mk 10 RD :110 m HH : 95/125 m Tower Type: Tubular Steel	2000 kW	Available (16.01.2020)	Yes (31.12.2016)
14.	M/s. Wind World (India) Limited "Wind world Towers", Plot no. A-9, Veera Industrial Estate, Veera Desai Road, Andheri - West, Mumbai - 400053 **Phone : 022-66924848** **Fax : 022-66990940**	Enercon GmbH, Germany	WW-53 (erstwhile E 53 in India) RD : 52.9 m HH : 75 m Tower Type: Concrete (Steel Upper Section)	800 kW	Available (18.04.2018)	Yes (28.03.2018)
15.	M/s. Winwind Power Energy Private Limited No. 322/10, Vallal RCK Nagar, Vengal Village Thiruvallur Taluk & District Pin - 601103 **Phone : 044-39223000** **Fax : 044-39223001**	WINWIND OY, Finland	WinWinD 1 MW RD : 60 m HH : 70 m Tower Type: Tubular Steel	1000 kW	Available (12.11.2015)	Yes (04.03.2018)

* State Electricity Boards / TRANSCOs/ State Nodal Agencies/ Developers shall refer complete Type Approval / Certificate of the models listed above including ISO certificate for verification of validity period, detailed specifications, power curve and all the other relevant information. **Also refer the renewed Type Certificate / ISO certificate for the validity period above than the period mentioned.**

This RLMM "ADDENDUM-II LIST" has been prepared with the available documents / information furnished by the wind turbine manufacturers for the designated wind turbine models during the period of review by RLMM committee appointed by MNRE, Government of India. State Electricity Boards, TRANSCOs, State Nodal Agencies, Developers and any party referring the "ADDENDUM – II List" along with "Main List dated 11.09.2014" and "Addendum – I List dated 09.01.2015" shall verify complete type approval / certificate of the models listed above including ISO certificate for verification of validity period, detailed specifications, power curve and all the other relevant information including its legal implications. **Interested wind turbine manufacturers may kindly watch the NIWE website regarding the call for the next "Main List".**

DISCLAIMER

Inclusion of any wind turbine manufacturer and wind turbine model in RLMM by the RLMM Committee (formulated by the Ministry of New & Renewable Energy, Government of India) is based on the documents and information furnished by the respective company and it does not amount to certification or recommendation in any manner including suitability, usability etc., of the wind turbine models included in the list.

Nevertheless, NIWE/MNRE shall in no way be responsible or liable for any consequences including technical, commercial, operational, environmental and legal implications that may arise due to the usage of the list by any party at any time. The responsibility for the usage, verification of complete documents and consequences thereof lies entirely with the user.

for National Institute of Wind Energy

(A. Senthil Kumar)
Additional Director/Head,
Standards & Certification

To

1. The Joint Secretary – (Wind Energy), MNRE, New Delhi.
2. The Director - (Wind Energy), MNRE, New Delhi.
3. All State Nodal Agencies
4. All State Electricity Boards / TRANSCOs
5. All Wind Turbine Manufacturers
6. All Financial Institutions
7. Indian Wind Turbine Manufacturers Association
8. Indian Wind Power Association.
9. NIWE Website niwe.res.in

INDIAN WIND POWER ASSOCIATION

Member Information Sheet

IWPA
helping mankind with energy from nature

1. Name of the Company :

2. Address for Correspondence :

3. Office Phone No. :

4. Person nominated as representative with designation (Should be an employee of the Company)

   Name :

   Designation :

   Phone No. (Office) : Mobile :

   Email :

5. Category of Members : ☐ Generating / Manufacturing (Machine/ Ancillaries)

(Please Tick the appropriate box)

☐ Service Providers (Including consultants)

☐ Educational & Research Institutions & other promotional bodies /

☐ Financial Institutions / Honorary

☐ Small Wind (Manufacturers/owners)

6. Brief Description about your Wind Electric Generator: (For Generating Members)

Sl. No.	Location	(A) No. of Wind Mills	(B) Rated Capacity in MW	Total {(A)x(B)} in MW	Make	Connected Substation	Located in STATE
1.							
2.							
3.							
	Total						

7. Whether units generated are: ☐ Sale to Board ☐ Adjusted in Factory

Indian Wind Power Association
Door No. E, 6th Floor, Tower -1, Shakti Towers, No. 766, Anna Salai, Chennai 600 002
Ph : 044 4550 4036 | Fax : 044 4550 4281 | E-mail : iwpahq@windpro.org / secretary.general@windpro.org | Website : www.windpro.org

Media News

Seeking Expression of Interest in associating with KSEB for Supplying Green Energy

Kerala State Electricity Board Limited (KSEB) is a company fully owned by the Government of Kerala, which is the State Transmission Utility (STU) and the Distribution Licensee in the State of Kerala which also owns Generation assets. KSEB is also the bulk power procurer for all consumers in the State including small distribution licensees. Further, KSEB is directly supplying electricity to 99% of the consumers in the State (113 Lakh consumers) as on date.

The power demand of Kerala is expected to be around 25,000 MU this year with 5 to 6% demand growth each year. We are looking forward to meet a portion of the energy requirement from green / renewable energy sources. Please let us know if you are interested in associating with KSEB and if so please inform the quantum available with your associates (Annual MU) and source (wind/solar/small hydel etc) for meeting our requirement.

Renewable Energy News Digest

National Institute of Wind Energy (NIWE), Chennai

PRESS RELEASE

Ministry of New and Renewable Energy (MNRE) is promoting deployment and use of renewable energy sources, including wind energy in the country. Due to concerted efforts of Central Government and the State Government, a total capacity of over 21 GW of Wind power has so far been installed in the country. This is a significant contribution to the current power scenario in the country which owes much to the concerted efforts of Central and State Government. However, all SLDC are backing down of wind power due to fluctuation and unpredictable nature of wind and this will leads to loss of billion of units of electricity.

In this connection, TANGEDCO, Government of Tamil Nadu, Ministry of New and renewable Energy, Government of India and National Institute of Wind Energy (NIWE) come forward to offer the reliable / viable solution for utilizing the wind power to the maximum extent in the country. In addition, NIWE / MNRE has finalized a tentative road map to carryout wind power forecasting as a micro pilot project at Ayyanaruthu and extend the service with IWPA funding to the entire State of Tamil Nadu, facilitating scheduling a grid management.

On the other hand, National Institute of Wind Energy (NIWE) / Ministry of New and Renewable Energy (MNRE) has already carried out various initiatives to create India specific forecasting model to support the Indian Wind Industry. Now, NIWE / MNRE in collaboration with Vortex Factoria de Calculs, S.L., Spain is ready to provide its wind power forecasting services initially in Tamilnadu and will be extended to entire country. The wind power forecasting project aims to provide forecast of wind and wind power from wind farm / substation to support the scheduling and dispatching process of electricity for wind power generators. The ultimate deliverable of this project is to ensure higher level of wind energy evacuation mitigating effects on the stability of the grid and the security of the energy supply. This will support the load dispatch centers for scheduling and dispatching of electricity from wind farms for demand supply management with ease.

An event viz., launch of wind power forecasting services is going to take place on 13th MAY 2015 at 3:10 PM at National Institute of Wind Energy (NIWE), Chennai campus. Smt. VARSHA JOSHI I.A.S, Joint Secretary (WE) , MNRE,NEW DELHI and Shri. RAJESH LAKHONI, I.A.S, Principal Secretary, Energy, Tamil Nadu will Launch the WIND POWER FORECASTING SERVICES and on the same day the service will be dedicated to the nation. Entire wind industry including TANGEDCO officials, Wind turbine Generators / manufacturers, various members from Indian Wind Power Association (IWPA) and Indian Wind Turbines Manufacturers Association (IWTMA) are likely to be participate in the said event.

Press and media are invited and requested to give a wide coverage.

State Gets Power to Chase and Predict Wind Energy

May 14, 2015

CHENNAI: The nation's first wind power forecasting micro pilot project was launched in Tamil Nadu on Wednesday.

Speaking to reporters here, Prof K Kasturirangan, chairman of the Indian Wind Power Association, said that three billion units of wind energy worth `900 crore were lost due to change in the grid frequency, which was reduced after the northern grid tripped and blacked out 22 States in 2012.

The Tamil Nadu Transmission Corporation Limited (TRANSCO) was cautious about scheduling wind power due to fluctuations as nobody had an idea of how much wind power was available to be scheduled for the State load dispatch centre. As a result, three billion units of wind power was lost, he said.

But now, with wind power forecasting, TRANSCO would have the data of wind power available every 15 minutes through the sub-stations, he said.

"Now, TRANSCO will know the availability of wind power and have a proper mix by using the total wind energy resources available," he said.

Talking about the project, K Boopathi, additional director and head Wind Resource Assessment Unit, National Institute of Wind Energy, told reporters that the micro-project would be effected in four sub-stations in Ayyanaruthu in Kayathar and Udumalpet.

"From there it will be expanded across the State in 134 substations," he added.

Although there were many service providers of wind power production forecasting, this is the first such project by the Ministry of New and Renewable Energy (MNRE).

Varsha Joshi, Joint Secretary (Wind Energy), MNRE, said the National Institute of Wind Energy (NIWE) and MNRE, in collaboration with Vortex Factoria de Calculs, Spain, was ready to provide its wind power forecasting services initially in Tamil Nadu. "This will be extended to the entire country," she added.

Boopathi said the project aimed at providing forecasting services to the wind industry every 15 minutes up to 10 days ahead.

"This will support the load dispatch centres for scheduling and dispatching of electricity from wind farms for demand supply management with ease," Bhoopathi added.

The State power distribution company wants wind power forecasting service in order to manage grid properly and effectively

The project will provide forecast on wind and quantum of energy from a wind farm or substation

The equipment in the substation will accumulate data every 15 minutes and send it to the National Institute of Wind Energy through FTP

The data will then be transferred to State Load Despatch Centre, which will know how many units of wind energy is available to be transferred to the grid

This will ensure high level of wind energy routing and mitigate effects on the stability of the grid and security of energy supply

Source: The New Indian Express

Forecasting service set to benefit wind industry

May 14, 2015

The unpredictable nature of wind, which has been a stumbling block for utilising wind energy in the State, is set to get a boost with the launch of a wind energy forecasting service in the city on Wednesday.

The National Institute of Wind Energy in association with Vortex Factoria de Calculs, Spain, is offering the wind energy forecasting services.

Varsha Joshi, Joint Secretary, Ministry of New and Renewable Energy, launching the micro-pilot project of forecasting, said the State having one third of the wind energy of 21 giga watt in the country, the forecasting services would help in better synchronisation between wind energy and conventional power.

K. Kasthurirangaian, chairman, Indian Wind Power Association, explained the low cost but poor evacuation of wind energy due to lack of forecasting and scheduling by the stake holders, and wanted TANGEDCO to take the initiative by backing down their thermal units during peak wind seasons.

Source: The Hindu

New project to help tapping of wind power

May 14, 2015

National Institute of Wind Energy has tied up with Spain-based Vortex to provide wind power forecasting and scheduling for wind farms connected to five substations at Kayathar and Udumalpet

Chennai: A first-of-its-kind project to forecast wind power generation was launched in Tamil Nadu on Wednesday. This

will enable better tapping of wind power and to avoid forcible backing down of wind mills resulting in losses to entrepreneurs. The National Institute of Wind Energy (NIWE), an autonomous research and development institution of the ministry of new and renewable energy has tied up with Spain-based Vortex to provide wind power forecasting and scheduling for wind farms connected to five substations at Kayathar and Udumalpet, said Indian Wind Power Association chairman Prof K. Kasthurirangaian.

He said forecasting and scheduling would be extended to all the 134 wind pooling substations and 7420 mw wind mills connected to it. The wind forecasting project was mooted after losses suffered by windmill owners following backing down of wind power by the grid managers due to fluctuation and unpredictable nature of wind, Prof Kasthurirangaian said, adding that in 2013 and 2014, wind generators lost over two to three billion units of electricity a year due to backing down.

"Not only wind mill owners face loss, the Tangedco was forced to purchase power at high cost leading to its increased debt burden," he said. The NIWE will be able to provide 15 minutes forecast up to 10 days ahead. The bulletins can be revised every three hours to provide much accurate prediction. The grid manager in the state load dispatch centre would make use of the prediction along with real time data on wind power generation at substation level to schedule evacuation of power.

"The difficulty in absorbing wind energy will be addressed with the launch of forecasting and scheduling facility," said Tangedco (generation) director S. Devarajan. Launching the forecasting facility at NIWE here, Varsha Joshi, joint secretary, MNRE, said forecasting was the way forward for wind energy industry. "This has to be replicated in other states as well," she said, appreciating grid managers of Tangedco for handling over 7000 mw of wind mills with no forecasting resources on hand.

Source: Deccan Chronicle

Cheyyur plant not viable

May 21, 2015

Experts say price of electricity from the 4,000-MW project will be fivetimes higher than the tariff at other ultra mega power plants

he proposed 4,000-MW ultra mega power project at Cheyyur is financially not viable and would put an upward pressure on electricity tariff. This would also make electricity unaffordable for consumers, says a report.

The report prepared by US-based Institute for Energy Economics and Financial Analysis (IEEFA) for Chennai-based Indian Institute of Public Policy explains that in the first year of its operations, which is 2021, the tariff for consumers would be Rs. 4.9 per unit. On an average, tariff would be Rs. 5.95 per unit over its 40 year life.

"This pricing is five times higher when compared to the tariff at the other ultra mega power plants (UMPPs) and coal-fired power plants," says Jai Sharda, Managing Partner, Equitorials, a financial analysis firm that studied the economic viability of the Cheyyur plant.

The four other UMPP projects in India have a lower tariff cost of Rs 1.15 per unit to Rs 3.7 per unit when compared to Cheyyur. Mr. Sharda says that there is a problem with the UMPP model itself. "There are several financial defects in this model and this needs to be addressed," he says.

Earlier this year, the Ministry of Power terminated the bid process after seven private players pulled out saying it was unworkable. The Union government then promised to revise the bidding guidelines. "This again will only burden the State Electricity Boards and the consumers," Mr Sharda says.

According to the report, coal constitutes 55 per cent of the annual expenditure for the plant. The project is being developed according to the assumption that it would require an annual 12 million to 14 million tonnes of imported coal. Such a business model would put its coal costs at roughly twice what

they would be if domestic coal were used. An increase in coal price would further push tariff price up.

M.G. Devasahayam, former chairman of the Haryana Electricity Board, says, "If we tap solar and wind energy, we will not need such projects in Tamil Nadu." He also questioned whether the TNEB can afford to buy power from the UMPP despite its losses and whether consumers can afford to pay such a hefty price.

Mr. Sharda notes that with the existing pipeline of power projects in Tamil Nadu, the need for construction of a plant at Cheyyur is diminishing.

Environmentalists unhappy

The Rs. 24, 200-crore ($ 4 billion) worth UMPP at Cheyyur, a taluk of Kancheepuram district, has always been a controversial subject among environmentalists and locals.

Tamil Nadu will receive 1,600 MW of the electricity from the plant.

The lead utility for the project is Tamil Nadu Generation and Distribution Corporation Ltd.

Source: The Hindu

TN takes the lead in wind forecasting

May 13, 2015

State can manage wind power better, this will lead to an increase in generation too

The National Institute of Wind Energy (NIWE) will provide wind forecasting services to Tamil Nadu's state-owned electricity generation and distribution utility, TANGEDCO. With precise estimates of how much wind power would be available in the 96 fifteen-minute intervals of the following day, TANGEDCO will be able to handle fickle wind power better—as a consequence of which the state could accommodate more wind power.

The decision that NIWE (formerly, Centre for Wind Energy Technology) would provide forecasting services to TANGEDCO was announced formally today at a function held at the NIWE premises here.

K Boopathi, Additional Director and Head of Wind Resource Assessment Unit at NIWE, said that the institute would gather data about wind forecast from various wind farms in the state and arrive at wind power generation estimates for the following day.

Wind farms, which generate the primary data, are allowed to fine-tune their forecasts within three-hour blocks of the day. Once TANGEDCO knows how much wind power is expected to flow into the grid, it could have other power units either flex up or flex down generation. Gas and hydro based units are capable of such quick switch-on, switch-off.

Of the 23,000 MW of wind power in the country, Tamil Nadu has about 7,200 MW. The state electricity distributor has been struggling to handle such large amounts of wind power, the generation of which solely depends upon wind flows and hence somewhat unpredictable. Because of this, the state has not added much wind power capacity in the last couple of years. But forecasting would empower TANGEDCO to handle more wind capacity, experts said.

First time state-wide

Wind power forecast was made mandatory for wind farms of more than 10 MW capacity even two years back by the Central Electricity Regulatory Commission (CERC), with stiff penalties for waywardness beyond 30 per cent of the forecasts. This generated a howl of protests from the wind industry and the Commission deferred the application of the 'scheduling and forecasting' to a later date.

Ever since, wind farms have been doing 'scheduling and forecasting' at individual unit level, but this is the first time the exercise is being attempted on a state-wide basis.

Single-agency forecasting

Wind industry players argue that this is the way to do it. Madhusudhan Khemka, Chairman of the Indian Wind Turbine Manufacturers' Association, says that forecasting is best done by a single agency—perhaps the State Load Despatch Centres—with inputs from individual wind machines.

On the question of penalty—whenever it comes into force—Boopathi said that it was yet to be decided as to who would be liable. However, he observed that disaggregated data would show which wind units were responsible for forecasts going awry, and those wind farms would be penalised.

Boopathi said that other states, notably Rajasthan, also showed interest in availing themselves of the forecasting services of NIWE.

Source: The Hindu BusinessLine

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