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## *From the Chairman's Desk*



Dear Friends

**Interactive Meeting with Hon'ble Minister Shri Piyush Goyal at New Delhi:** A meeting was held at New Delhi on September 02, 2015 chaired by Hon'ble Minister Shri Piyush Goyal where Energy Ministers from five Wind Rich States, Energy Secretaries and Nodal Agencies from all States were present. Answering a query by the Minister, the Director – Generation of TANGEDCO said that NIWE was giving them Wind Energy Forecast for all 11,800 WEG's of, 7480 MW Capacity every Morning & Evening on behalf of IOWPA which is an eye opener for them & the accuracy is 85%. The Minister requested that such facility be made available in all Wind Rich States.

**Launch of re-assessed wind potential by NIWE:** NIWE has developed Numerical Wind Atlas for the entire country which was formally launched by the Hon'ble Minister Shri Piyush Goyal. According to NIWE's revised estimates there is a potential of 302 GW at a height of 100 Meters for wind installations in the country.

**Progress of Forecasting Project:** We are pleased to note that the TANGEDCO Officials even at Private Conversations openly state that the forecast data has provided the much needed "Visibility" which they were lacking & accuracy is to their Satisfaction. TNEB staff are extending more Positive support to evacuation after the receipt of information on Forecasting.

**National Council Meeting at Mumbai:** The Third National Council Meeting was held on September 21, 2015 at Mumbai. Several issues of National importance and State specific were discussed. Lack of timely payments in Tamil Nadu, Rajasthan and Madhya Pradesh; withholding of PPA signing; delay and Payments in Maharashtra for 1 Year are annoying investors. SERC's announcing tariffs is not enough. MNRE should ensure that the payments for sale of Energy should be paid in time to attract fresh Investments.

**Global Investors' Meet at Chennai:** The Global Investors' Meet was organized in a grand scale and the MoUs for investment more than doubled to reach an amount of Rs. 2.34 Lakh Crores. While there are offers for sizable MW of Solar installations, no appreciable offer for Investments in Wind Mills.

**Demand notice for refund issued by TANGEDCO of 25% of the unutilized Banked units paid during prior periods:** Based on their Audit Report, TANGEDCO has sent a notice to our Members who had availed 100% payment from 2009

## INDIAN WIND POWER ASSOCIATION

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to 2014 of the unutilized banked units to refund 25% of amounts paid. There are clear guidelines that state when R&C measures are in place, 100% of the unutilized banked units should be paid. Your Association has taken up this case and a circular has been sent to all Members. Draft of letter to be issued in reply to the TANGEDCO Notice was also forwarded. Meanwhile a writ is being filed with Voluntary support of Members affected in the High Court (Madurai Bench) requesting Stay which we are likely to get. Affected Members may please join. We will keep you posted of the developments.

**An appeal by National Metallurgical Lab (NWL) for scrap generated by Wind Mills:** Permanent magnets which is one of the components used in WTGs and contains 25% – 30% of Rare Earth Metals. China produces about 97% of Rare Earth Metals and it had passed certain export restrictions which has caused some concern for users of Rare Earth Metals in the rest of the world.

The NWL at Jamshedpur has been assigned by the Government of India, the job of developing a sustainable desi technology for recovery

of rare earth metals from scrap. The organization has appealed for a few kilograms of scrap for their testing purposes. I, therefore, appeal to members who have scrap (wind turbine magnets scrap) in their possession to contact our National Office by phone or e-mail urgently.

**World Wind Conference at Jerusalem, Israel:** The Annual World Wind Conference organized by WWEA is scheduled to be held at Jerusalem, Israel on October 26 - 28, 2015. As one of the Vice Presidents of WWEA, I would be participating in the Conference.

**IWPA pays homage to our former National Council Member:** Shri Jitendra L Thakkar, our former National Council Member for many years, passed away at Hubli on August 24, 2015. We will miss him and pray that God grant strength to the bereaved family to bear the loss.

With best wishes and regards

**Prof. Dr. Kasthurirangaian**  
Chairman

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## Interview of IWPA Chairman Prof. Dr. K Kasthurirangaian with Dr. Rishi Muni Dwivedi, Associate Director, IWTMA regarding Forecasting Project in Tamil Nadu.

### Introduction

IWPA has taken the initiative in Tamil Nadu for setting up of a State-wide Forecasting mechanism for 7500 MW to enable optimal evacuation of wind energy. To understand this mechanism Editor, Indian Wind Power and Associate Director, IWTMA (Indian Wind Turbine Manufacturers Association) Dr. Rishi Muni Dwivedi had an interview with IWPA Chairman Prof. Dr. K Kasthurirangaian. The excerpts of the interview are given below.

#### 1. What is the future of wind energy within the overall energy mix?

**Ans:** Wind energy is the only source of energy which does not require water at all. Wind energy installations in India is growing at 27% CAGR (Compound Annual Growth Rate).

India is currently fourth Largest in the world in terms wind energy installations.

Given the decisions of various State Electricity Commission about the RPO fixation and its enforcement, We believe it will take the growth of wind energy to 20% of the total energy required by 2022.

We are hopeful that our country can achieve the target of 60 GW set by the Government.

#### 2. Please tell why your Association has taken up this Forecasting Project?

**Ans:** Ideally this infrastructure should have been facilitated by the Government.

Two to three billion units of wind power is being lost each year in 2013 and 2014 because of back down of Wind Mills since there is no mechanism to predict the wind generation and the investors are affected financially. Industries depending on captive power from wind mills were affected the most. Utility lost the opportunity to buy cheap and clean power available in the State. The consumers were also affected.

Hence the Association with the support of its Wind Generator Members decided to come forward and sponsor the setting up of the facilities as an "industry sponsored project" utilizing the capability of NIWE.

We are thankful that the MNRE, State Government and NIWE had readily accepted the offer and thus the project is taking shape.

As you are aware, the high wind season lasts only for five months from May to September every year. If evacuation does not take place during these five months, we will not only lose God's gift of free, clean energy and the investors will also lose heavily.

#### 3. Why is Forecasting so essential in evacuating wind energy?

**Ans:** Forecasting is essential for scheduling wind energy primarily for the following two reasons:

- Energy should be consumed as soon as it is generated. Presently we do not have a storage mechanism for such large quantum of Energy.
- Wind energy is not only seasonal but is variable and intermittent. We have to provide a visibility to Grid operator as to how much of wind energy is likely to be generated.

Wind energy is termed "infirm power" since there is wide variation from one day to the next and also the intra-day variation can be high.

Thankfully these days we have the technology to assess with a reasonable degree of accuracy of how much wind energy is likely to be generated in the next 15 minutes, next one hour, next day, one week ahead, etc. The information regarding the likely generation of wind power, will help the SLDC to give visibility of the likely quantum of generation of wind energy and helps to schedule the power thus facilitating evacuation optimally.

#### 4. Why was NIWE chosen as the Forecasting Service Provider?

**Ans:** This is an interesting story. We have made this offer of installing the forecasting infrastructure to Tamil Nadu SLDC almost two years back. We had even mentioned that the infrastructure once installed would be the property of the SLDC. However, the SLDC was hesitant to accept this offer from the generators. In February 2015, the Government

organized the REINVEST at New Delhi. An ambitious target of 175GW which includes 60 GW of wind energy was announced by the Government. The very next month sometime in March 2015, they soon realised that in order to increase capacity the evacuation problems primarily in Tamil Nadu had to be resolved. As you know, Tamil Nadu accounts for 40% of the wind energy installations in the country.

MNRE came to the conclusion that having a reliable forecasting mechanism is the only answer to ensure further growth of the wind industry. Therefore, MNRE in consultation with the SLDC had sanctioned expeditiously a Pilot Forecasting Project in Tamil Nadu at Ayyanaruthu Wind Pooling substation. NIWE was given the responsibility of implementing the project. It was a coincidence that just a year back four of the scientists at NIWE were trained in Spain in the Forecasting software.

When we learnt of this development with the support of most of our Wind Generator Members we offered to sponsor the entire project thus enlarging the scope of the Pilot Project. This proposal was readily accepted by MNRE, NIWE and TANGEDCO. That is how NIWE became an important Forecaster in this Project.

#### 5. What is the MNRE's role in this project?

**Ans:** MNRE has been a pillar of support for RE development. Without MNRE's intervention and push, this project would not have taken off in such a short notice. The role played by MNRE is crucial not only in the sanctioning of the project but also getting all the constituents together and bringing coordination amongst them.

This project is complex and there are numerous hurdles as we to take this project forward. Thankfully we are in the last leg and we hope to complete the project by the end of August 2015. Therefore, this wind season, the wind generators had benefitted partially but next year we will see the full benefits of installing this Forecasting mechanism.

#### 6. Is the State Utility using the forecast data given by NIWE / IWPA?

**Ans:** Presently we are giving forecast based on the partial installations. However, this has a fairly good accuracy. It is through this process that on August 11, 2015, 84.359 million units was evacuated which is the highest evacuation till date. The system needs to be fine-tuned for better accuracy. Since this is the first project of its kind, there is obviously a few teething troubles and some learning involved. It is like learning to ride a bicycle. We may falter here and there

before mastering the art of riding the bicycle. Same analogy holds good for the Forecasting exercise.

#### 7. Tell us briefly how this system works?

**Ans:** To give a forecast we need the following three inputs:

- Past historical data** for two years. This will give the generation pattern in the immediate past. This is a crucial input to the software algorithm for generating the forecast. This data is taken from the past hand written records maintained at the individual Wind Pooling Substations.
- Real time generation of wind energy.** This is provided by the setting up of self consuming energy meters at the Wind Pooling Substations. The meters will furnish real time data i.e. how much wind energy is being generated right now. This real time data is relayed to the servers located at NIWE / SLDC automatically as configured. Generally when generation is taken across a larger geographic area, the accuracy is better & works out deeper.
- Meteorological Data.** This involves getting satellite data of the prevailing weather condition (present and predicted) where all the wind mills are located. Therefore, the GPS coordinates i.e. Latitude and Longitude of each and every wind mill and Substation is needed for the purpose as well as hub height & Power curve of WEG.

All the three types of data are synthesized in the Forecasting software and the Forecast output is generated. It is through this process that we are able to predict with a reasonable level of accuracy the likely wind generation.

It may be mentioned that the accuracy level depends upon the quality of input. If reliable input is given then the accuracy goes up otherwise there could be deviations. Nevertheless with the passage of time the Forecasting model has to be trained to provide better accuracy over a period of continuous real time data the accuracy will improve. The deviations can be contained to a single digit

#### 8. How is this data analysed?

**Ans:** The data analysis is done at NIWE. Firstly the historical data given to NIWE is digitized in a specific form and fed into the software model developed by NIWE in collaboration with Vortex Factoria de Calculs, S.L. a Spanish company which is specialised in Forecasting.



NIWE has created an automated system to pick up and process the real-time generation data which is received. This processed input is continuously fed into the forecast model.

**9. What are the difficulties in adapting the data?**

**Ans:** Generally it is the quality pertaining to the one-time input of historical data. These data are manually recorded since SCADA systems are not available in all the Wind Pooling Sub-stations.

Since the historical data is recorded manually it is time consuming to collect data at Site and to digitize and verify the accuracy of the data entry. This has caused a delay in implementing the project.

At a few Substations which were newly installed, there are no SCADA data.

The specification of the meters as approved by TANGEDCO / TANTRANSCO had meter reading with two decimals. NIWE wanted more accuracy and insisted on the meter reading to reflect to one millionth of a unit. The meters had to be recalibrated to six decimal units and this further delayed the process. All these meters were custom built exclusively for the project.

There were also connectivity issues due to network. For example a few SS located in remote areas when they face

power outages, there is a break in the transmission of data from the individual SS to NIWE. Such incidents affected the flow of real-time data. Real-time generation data is one of the key inputs in updating the forecast data.

Due to sudden changes in atmospheric conditions, the pattern may suddenly change which the software is not able to at times quickly adapt to these sudden changes. These are some of the difficulties we faced when NIWE was analyzing the data, but all overcome.

**10. What is the current deviation and how can this deviation be minimised and improve the accuracy?**

**Ans:** Presently on an average the deviation is contained within 10%. With more training and accuracy of inputs, we expect the deviation could be brought down.

**11. How will this project fit within the overall framework of the REMC (Renewable Energy Management Centre) proposed by PGCIL (Power Grid Corporation of India Ltd.)?**

**Ans:** We have been given a draft of the REMC framework and a clear picture is yet to emerge. PGCIL may be installing REMC in TN in 2015-16. We have requested PGCIL officials to expedite installation & Promise them all support from IWPA. These details will emerge in the coming months.

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## IWPA suggestions on APERC Regulation 2006



18<sup>th</sup> September 2015

To,

The Secretary,  
Andhra Pradesh Electricity Regulatory Commission (APERC),  
4th Floor, 11-4-660, Singareni Bhavan, Red Hills, Hyderabad, - 500 004

Dear Sir,

**Subject: Indian Wind Power Association (IWPA) response to APERC draft amendments to the APERC (Interim Balancing and Settlement Code) Regulation 2006, (Regulation No. 2 of 2006)**

We would like to introduce our self as The Indian Wind Power Association (IWPA) which was set up in 1996 as a non-profit organization. The association is having more than 1138 members spread all over India. Since its inception it has worked consistently, towards removing barriers to wind power development and creation of an enabling regulatory and policy environment for investments in this sector. The association is working closely with several national industry bodies such as the IREDA, MNRE, Ministry of Power, Ministry of Environment, NIWE, CERC, CEA, State utilities, State Electricity Regulatory Commissions, State Nodal Agencies, etc.

The association also publishes a prestigious technical Monthly Magazine "WINDPRO" which is supplied free of cost to the members to disseminate information on all the current issues not only in India but in the entire world. The association also organizes Seminar, Training Programs, and Wind Conference & Exhibitions. Indian Wind Power Association (IWPA) is also member of World Wind Energy Association.

The Honorable Commission has come up with a draft notification in the matter of amendments to the APERC (Interim Balancing and Settlement Code) Regulation 2006, (Regulation No. 2 of 2006).

As a key stakeholder in the development of renewable energy in A.P., we wish to share with our suggestions on the aforesaid draft that we believe have significant impact on the commercial and operational viability of wind power projects.

We would like to submit before the Honorable Commission to make the following change in Clause 3 (f) of Appendix 3, so that it will be in line with the wind and solar power policy under which the unutilized banked energy shall be considered as deemed purchase by the DISCOM at the pooled purchase cost as determined by APERC for the applicable year.

---

**Indian Wind Power Association - Andhra Pradesh State Council**

No. 6-2-1012, 2<sup>nd</sup> Floor, TGV Mansion, Opp. The Institution of Engineers, Khairatabad, Hyderabad - 500 004  
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Draft Amendment	Changes Proposed
<p><b>Appendix 3</b></p> <p><b>Clause 3 (f)</b></p> <p><i>The purchase price payable by the DISCOMs for unutilized banked energy will be equivalent to 50% of the Pooled Cost of Power Purchase, applicable for that financial year, as determined by the Commission under RPPO/REC Regulation (1 of 2012). DISCOMs shall settle such purchase transactions with the generators by 31<sup>st</sup> March of each year.</i></p> <p><i>Provided the unutilized banked energy from such Solar and Wind Power Projects and for such period as mentioned in G.O.M.O.Ms. No.8, Dated 12.02.2015 and G.O.M.O.Ms.No.9, Dated 13.02.2015 shall be considered as deemed purchase by DISCOM(s) at the Pooled Power Purchase cost, applicable for that financial year, as determined by the Commission under RPPO/REC Regulation (Regulation No. 1 of 2012). DISCOM(s) shall settle such purchase transactions with the generators by 31<sup>st</sup> March of each year."</i></p>	<p><b>Appendix 3</b></p> <p><b>Clause 3 (f)</b></p> <p><i>The purchase price payable by the DISCOMs for unutilized banked energy will be equivalent to Pooled Cost of Power Purchase, applicable for that financial year, as determined by the Commission under RPPO/REC Regulation (1 of 2012). DISCOMs shall settle such purchase transactions with the generators by 31<sup>st</sup> March of each year.</i></p> <p><i>Provided the unutilized banked energy from such Solar and Wind Power Projects and for such period as mentioned in G.O.M.O.Ms. No.8, Dated 12.02.2015 and G.O.M.O.Ms.No.9, Dated 13.02.2015 shall be considered as deemed purchase by DISCOM(s) at the Pooled Power Purchase cost, applicable for that financial year, as determined by the Commission under RPPO/REC Regulation (Regulation No. 1 of 2012). DISCOM(s) shall settle such purchase transactions with the generators by 31<sup>st</sup> March of each year."</i></p>

We will be at your disposal for any further clarification required from our side.

Thanking you,

Yours faithfully

**S. Sri Murali**  
Secretary – IWPA, AP Chapter

## BEREAVEMENT

IWPA condoles the passing away of Shri Jitendra L Thakkar on August 24, 2015 at Hubli



Shri Thakkar was a member of the National Council for several years and contributed to the development of IWPA.

May his soul rest in peace

## An Appeal from National Metallurgical Laboratory, Jamshedpur



**CSIR-NML**  
**राष्ट्रीय धातुकर्म प्रयोगशाला**  
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जमशेदपुर - 831 007, भारत

**National Metallurgical Laboratory**  
(Council of Scientific & Industrial Research)  
Jamshedpur - 831 007, INDIA



**Dr. S.K. Sahu**  
Senior Scientist, MEF Division  
E-mail: [sushanta@nmlindia.org](mailto:sushanta@nmlindia.org)

Ref: NML/MEF/SKS/CSC-0132  
Date: 11.09.2015

To  
**The Secretary General**  
Indian Wind Power Association  
Door- 'E', 6<sup>th</sup> Floor  
Shakti Towers - 1  
766, Anna Salai, Chennai - 600 002

**Dear Sir,**

As you aware, for Sustainable Energy Growth, India has ambitious plan to utilize wind/solar energy resources for affordable and clean energy production. In view of this, under 12th Five Year plan, Government of India has given the priority for the extraction of futuristic and valuable **Rare Earth Metals** which also have wide application for wind energy production apart from other major uses. Currently, China is producing 97% of the rare earth metals. Few years back, China's restriction on export policy has given an alarm for rest of the world to develop its own technology for fulfilling the increasing demand of rare earth metals. As India is not rich of primary rare earth resources, we need to work on the recovery of these valuable metals from waste or scraps after its end-of-life. Permanent magnet is one of the major components used in wind energy turbines, which contains around 25-30% of Rare earth metals.

Under 12th Five Year Plan of Govt. of India, we have been assigned to develop a sustainable technology for recovery of rare earth metals from scrap/waste magnets, e.g. wind turbines magnets. Therefore, for research purpose we require some kilograms of magnets of scrap value. Since you are playing important role in Indian Wind Power Association, I request you to kindly direct/suggest us for collecting the scrap magnet samples from concerned sources. Your help in this regard will be highly appreciated.

With kind regards

Yours sincerely

  
Dr. S.K. Sahu

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## Request to POSOCO

**Prof. Dr. K Kasthurirangaian**  
Chairman

603 'C' Block, Pioneer Complex, 1075, Avinashi Road  
Coimbatore - 641 108 INDIA  
Phone : 91-422-6585908, 6586908  
Fax : 91-422-2248408  
E-mail : office@rsmautokast.com, chairmaniwpa@windpro.org



September 3, 2015

**Shri S.K. Soonee,**  
CEO, Power System Operation Corporation Ltd.,  
B-9, Outab Institutional Area, Katwaria Sarai, New Delhi - 110 016

Dear Sir

### Sub: Request for Kind Action from your end

We are glad to inform that having undertaken the Tamil Nadu project of forecasting on behalf of 7480 MW Wind Installations, of forecasting for next 5 days is now operational and made available to the SLDC, C&MD and Energy Secretary, updated every 12 hours by NIWE. The happy reaction of the user of the forecast viz., SLDC is that they find the information provided a high level of visibility as to level of incoming wind energy in Tamil Nadu for the next five days. The information, they say, is almost 85% near to actuals. We, IWPA, are immensely happy that we are providing such valuable information which helps the better level of evacuation of Wind Energy.

### RRAS:

It is good CERC have notified on 13 August, 2015, the RRAS Ancillary System, which has come to the rescue of load dispatch centres (LDC) in better maintenance of grid parameters. Now it is obligatory on the part of Central Thermal Generating System of ramping up or down the generation level as and when demanded by LDCs. It is very kind of you to have pronounced in the open MNRE meeting on 2 September, 2015 at New Delhi, that such RRAS support is also applicable to LDCs when there is a sudden drop of wind velocity on the consequent on wind generation, the Central Thermal Units will come to the rescue by providing the extra MW required to maintain the Grid.

We request operational and commercial parameters for such rescue operations, until good wind comes back, be given to all those concerned for taking up such operations.

### GRID CODE ON MUST RUN

Many Utilities like in Tamil Nadu take the version of the Grid Code for a ride by grid dropping wind mills from 30 to 40 per cent of the high

wind time, thereby the Generators losing 2.3 to 3 billion units annually. SLDC takes the excuse to use the rider that the SLDC can grid drop wind mills in the event of or for the purpose of grid safety. Such misuse by the SLDCs needs to be put an end to by adding in the Grid Code such safety clause can be resorted to only for one percent of the time in a year, ie.,  $365 \times 24 = 8760$  x one percent = 87.60 hrs in a year, and for such hours, wind generation is put off, the utilities are to compensate it by paying for the "deemed generation".

We hope such precautionary amendment of grid code will put an end to the misuse by the SLDC. We look forward to your early action.

### CARVING A SEPARATE VIABLE WIND CONTROL AREA FOR WEG IN TAMIL NADU

You are aware, though the Tamil Nadu has an installation of 7480 MW of wind installations, the wind being variable fluctuating and intermittent, there being no adequate balancing hydel installations in Tamil Nadu, to manage with sudden ups and downs of the wind. SRPC and IWPA have been for long mulling the idea of creating a separate inter-state control area like the one having Tamil Nadu wind, Saraswati Hydel, and/or Neyveli Lignite Corporation (for providing return corridor during swap). Early steps have to be taken in this direction from now on so that such new control area can become a reality during the ensuing financial year.

We shall be grateful for your kind and early action on the above points at an early date.

With best wishes and regards,

**Prof. Dr. K Kasthurirangaian**  
Chairman

Copy : Shri Anil Thomas, SRPC, Bangalore.

### Indian Wind Power Association

Door No. E, 6<sup>th</sup> 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

## Request for Formation of Liaison Team for Smooth Assimilation of Forecast Data by TANGEDCO

**Prof. Dr. K Kasthurirangaian**  
Chairman

603 'C' Block, Pioneer Complex, 1075, Avinashi Road  
Coimbatore - 641 108 INDIA

Phone : 91-422-6585908, 6586908

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E-mail : office@rsmautokast.com, chairmaniwpa@windpro.org



September 18, 2015

Dr. M Sai Kumar, IAS  
Chairman & Managing Director, TANGEDCO  
10<sup>th</sup> Floor, N P K R R Maaligai  
No. 144, Anna Salai, Chennai 600 002

Dear Sir

**Sub: Request for the formation of a Liaison Team as per the suggestion emanated in the Task Force Meeting**

In the last Task Force Meeting held at TANGEDCO on July 20, 2015 under the Chairmanship of the Director Operations TANGEDCO, it was decided to form a Team comprising of two representatives each from TANGEDCO and IWPA to facilitate the smooth assimilation of the Forecasting Data used in the Scheduling process by TANGEDCO.

The team will liaise with NIWE and with the Grid Managers. The team would also assist in resolving any issues that may crop up in the furnishing of data by NIWE and help sort any other data related requirements of the Grid Managers in the better absorption of more Wind Energy and better utilization / management of the Spinning Reserves in Hydel and Gas that TNEB has already has in the overall energy mix.

We shall be glad if you would please give your kind approval for the formation of the team and also nominate two officials for the purpose.

Thanking you

Yours faithfully

For Indian Wind Power Association

**Prof. Dr. K Kasthurirangaian**  
Chairman

---

### Indian Wind Power Association

Door No. E, 6<sup>th</sup> Floor, Tower -1, Shakti Towers, No. 766, Anna Salai, Chennai 600 002

Ph : 044 4550 4036 | Fax : 044 4550 4281 | E-mail : iwpa@windpro.org / secretary.general@windpro.org | Website : www.windpro.org

## Request for Equal Sharing among Generating Sectors for Backing Down due to fall in Demand

**Prof. Dr. K Kasthurirangaian**  
Chairman

603 'C' Block, Pioneer Complex, 1075, Avinashi Road  
Coimbatore - 641 108 INDIA  
Phone : 91-422-6585908, 6586908  
Fax : 91-422-2248408  
E-mail : office@rsmautokast.com, chairmaniwpa@windpro.org



September 19, 2015

Dr. M Sai Kumar IAS  
Chairman & Managing Director, TANGEDCO  
10<sup>th</sup> Floor, N P K R R Maaligai, No. 144, Anna Salai, Chennai 600 002

Dear Sir

### Request for equal sharing of the reduction in night load among Thermal, Hydel and Wind Generating Sectors

As you are well aware winds are available for generation in night as much as it is available during day time. As of now while most part of the wind generation is absorbed during the peak hours in the morning as well as in the evening, grid drop is still being done to a certain extent during the day time and the grid drop during the night hours is much more. Grid drops is resorted largely due to the decrease in load during the night hours. Therefore, for any reduction in load, wind mills are made to back down.

We are happy and thankful to TANGEDCO for arranging better evacuation of wind energy after we have made available through NIWE every morning and evening, the forecast of the hourly wind energy available for the next five days in Tamil Nadu. Analyzing the grid details uploaded every day by TANTRANSCO in their website, we find that there is a quantum drop in the load between day time and night time. The night load drop amounts to around 2,000 MW. For example on September 16, 2015 the reduction in load of 1,907 MW (12,967 MW – 11,060 MW) was managed by reducing about 391 MW of Hydel energy, 152 MW of Thermal and the entire balance of 1,364 MW (2,734 MW – 1,370 MW) by backing down wind energy.

It may please be observed that Wind Energy absorbs 72% of the reduction in load. Our plea is that such adjustments due to reduction of load during night should be judiciously shared by all generating sectors like Thermal, Hydel and Wind. This letter is a follow-up of the personal discussions we had with the TNEB officials' yesterday i.e September 18, 2015.

Thanking you

With best wishes and warm regards

Yours faithfully  
For Indian Wind Power Association

Copy to:

i) MD, TANTRANSCO; ii) Director Generation;  
iii) Director Operations; iv) CE NCES; v) CE Operations

**Prof. Dr. K Kasthurirangaian**  
Chairman

### Indian Wind Power Association

Door No. E, 6<sup>th</sup> 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



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## Letter issued by JS, MNRE inviting IWPA for Meeting with Minister



सत्यमेव जयते

वर्षा जोशी, आई.ए.एस.  
संयुक्त सचिव  
Varsha Joshi, IAS  
Joint Secretary

भारत सरकार  
नवीन और नवीकरणीय ऊर्जा मंत्रालय  
Government of India  
Ministry of New and Renewable Energy

D. No. 63/50/2015-WE  
Dated: 26.8.2015

*Dear Dr. Kasturirangaian,*

As you may be aware, with better Capacity Utilization Factors (CUFs) and greater hub heights, the wind resource potential is far more than previously estimated. As a nation it is imperative for us to make the best use of this clean, green, and low cost source of renewable power which takes up little land and is a valuable source of investment, job creation and power generation. With the recent introduction of scheduling and forecasting in wind, the problems being faced by the grid can now be brought to a far more manageable level.

2. In view of the revised wind capacity target of 60,000 MW, integrated planning of future capacity development assumes importance. A number of GIS resource tools for the purpose are now available which are useful for government agencies and developers alike. Furthermore, it is necessary to create a mutually agreed roadmap for undertaking this development with responsibilities of Central Government, State Governments and Industry clearly defined. A meeting on such issues is scheduled to be organized on **02.09.2015 (Wednesday)**.

3. For this purpose, you are cordially invited to a one-day interaction on wind issues, from **11.30 AM to 4.30 PM at Jacaranda Hall, India Habitat Centre, Max Mueller Marg, New Delhi - 110003**. The forenoon would have a workshop on GIS based resource tools and in the afternoon Hon'ble Minister of State (I/C), Power, Coal & NRE, will chair an interaction with the Hon'ble Energy Minister and Energy Secretary of all the windy states, and senior representatives of the wind industry. On this occasion, the revised online GIS based wind resource atlas developed by the National Institute of Wind Energy (NIWE) is also to be launched by the Hon'ble Minister. Agenda for the meeting is enclosed with this letter. A line of confirmation will be highly appreciated.

*With regards*

Yours Sincerely

*[Signature]*  
[Varsha Joshi]

Dr. K. Kasturirangaian  
Chairman  
Indian Wind Power Association  
Door No. E, 6th Floor, Tower-I, Shakthi Towers  
No. 766, Anna Salai, Chennai - 600 002



ब्लॉक नं. 14, केन्द्रीय कार्यालय परिसर, लोदी रोड, नई दिल्ली 110003  
Block No. 14, CGO Complex, Lodi Road, New Delhi 110 003  
Tel. : 011-24361027 Fax : 011-24367413 Email : varsha.joshi@nic.in

## Status of Worldwide Wind Market - 392 GW

September 9, 2015

- 21,7 GW of new installations in the first half of 2015, after 17 GW in 2014
- Worldwide wind capacity has reached 392 GW, 428 GW expected for full year
- China close to 125 GW of installed capacity
- Newcomer Brazil: fourth largest market for new wind turbines

Bonn (WWEA) – The worldwide wind capacity reached 392'927 MW by the end of June 2015, out of which 21'678 MW were added in the first six months of 2015. This increase is substantially higher than in the first half of 2014 and 2013, when 17,6 GW respectively 13,9 GW were added. All wind turbines installed worldwide by mid-2015 can generate 4 % of the world's electricity demand.

The global wind capacity grew by 5,8% within six months (after 5,6 % in the same period in 2014 and 4,9 % in 2013) and by 16,8 % on an annual basis (mid-2015 compared with mid-2014). In comparison, the annual growth rate in 2014 was lower (16,5 %).

Reasons for the relatively positive development of the worldwide wind markets are certainly the economic advantages of wind power, after all its increasing competitiveness, uncertainties regarding the international oil and gas supply, and the pressing need to go for emission free technologies in order to mitigate climate change and air pollution.

**Stefan Gsänger, WWEA Secretary General:** "The world market for wind power is booming like never before, and we expect new record installations for the total year 2015. The main markets are still China – with an astonishing growth of more than 10 Gigawatt within six months – USA, Germany and India. Brazil showed the highest growth rate of all major markets, the country has increased its wind power capacity by 14 % since the beginning of this year. However, several of the European markets are now very flat, and also the largest European market Germany expects a major slowdown in the coming one to two years, after the expected regulatory changes are in force.

The wind industry globally is today driven by a large variety of shareholders and stakeholders, from small and medium sized enterprises, large industries, energy cooperatives to environmental groups. For the future success, it will be crucial to continue and rather increase this variety."

**Total Installed Capacity 2011-2015 [MW]**

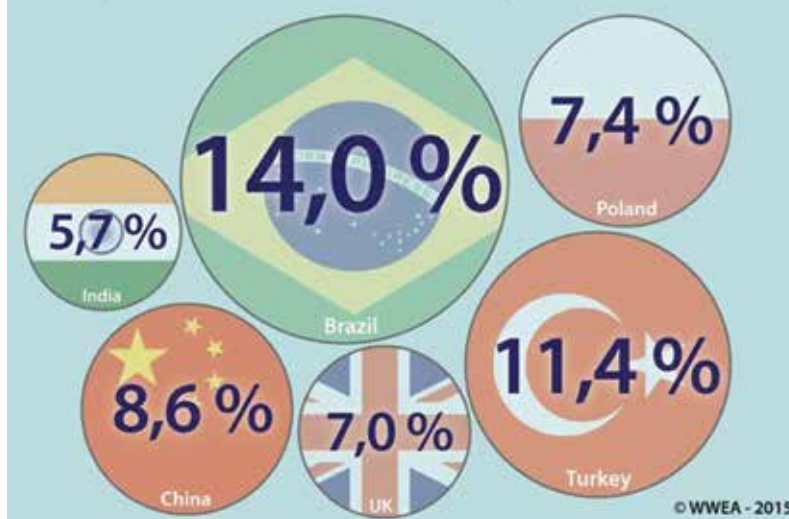


\* Estimated  
Total installed capacity: Includes all installed wind capacity, connected and not-connected to the grid.

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## Major markets - H1 2015 growth rates



## Countries/Regions with over 4 GW of total installed capacity\*\* by the end of June 2015

Position	Country/Region	Total capacity June 2015 [MW]	Added capacity H1 2015 [MW]	Total capacity end 2014 [MW]	Added capacity H1 2014 [MW]	Total capacity end 2013 [MW]	Total capacity June 2013 [MW]
1	China	124'710	10'101	114'763	7'175	91'413	80'827
2	United States	67'870	1'994	65'754	835	61'108	59'884
3	Germany	42'367	1'991	40'468	1'830	34'658	32'458
4	India *	23'762	1'297	22'465	1'112	20'150	19'564
5	Spain	22'987	0	22'987	0	22'959	22'918
6	United Kingdom	13'313	872	12'440	649	10'531	9'776
7	Canada	10'204	510	9'694	723	7'698	6'578
8	France	9'819	523	9'296	338	8'254	7'697
9	Italy	8'787	124	8'663	30	8'551	8'417
10	Brazil	6'800	838	5'962	1'301	3'399	2'788
11	Sweden	5'582	157	5'425	354	4'470	4'271
12	Denmark	4'959	76	4'883	83	4'772	4'578
13	Portugal *	4'953	0	4'953	105	4'724	4'547
14	Turkey	4'193	431	3'763	466	2'958	2'619
15	Poland	4'117	283	3'834	337	3'390	2'798
16	Australia	4'006	200	3'806	699	3'049	3'059
	Rest of the World	34'600	2'400	32'219	1576	26'493	23'802
	<b>Total</b>	<b>392'927</b>	<b>21'678</b>	<b>371'374</b>	<b>17'613</b>	<b>318'577</b>	<b>296'581</b>

\* by the end of March 2015

\*\* Includes all installed wind capacity, connected and not-connected to the grid.

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Courtesy : WWEA



"IWPA Stall at the Global Investors' Meet held at Chennai on September 09 & 10, 2015"

**KAY ARR**



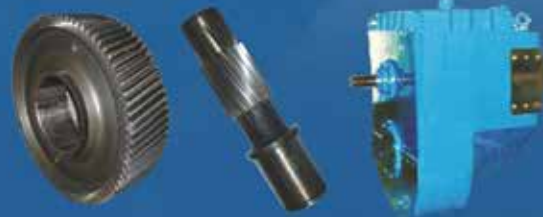
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## Proceedings of the 5<sup>th</sup> Annual General Meeting held at Babasaheb Dahanukar Hall, Maharashtra Chamber of Commerce, Kala Goda, Mumbai

The fifth Annual General Meeting of the Maharashtra State Council of the Indian Wind Power Association was conducted at Babasaheb Dahanukar Hall, Kala Goda, Mumbai.

### 1. Members Attended

31 Members attended the meeting



*Chairman welcoming the Chief Guest of the evening Shri Pramod Deo, former Chairman of CERC*

### 2. Welcoming the Members

Shri G N Kamath, President, Maharashtra State Council of Indian Wind Power Association, welcomed the gathering.

### 3. Report of the Activities of the MSC

Shri Arvind Prasad, Honorary Secretary, Maharashtra State Council of IWPA, had submitted a report on the activities taken up by the Maharashtra State Council during the year. The report is given below:

I, Arvind Prasad, Secretary of Maharashtra State Council stand before you to apprise you on the activities for the year 2014-15 of the Association. The basic activities of the Association in 2014-15 continue to be to take up the issues faced by the members either from the state utility MSEDCL or even from the regulations issued by MERC before appropriate judicial forums.

As subscription by the members are directly to the headquarters, the only receipts directly to the state council is for defraying the legal expenses being incurred on plethora of petitions, appeals and suits. During 2014-15 the state council collected Rs. 26.73 lakh from the members and IWPA

HQ also remitted our share at Rs. 7.47 lakh. Against the said aggregate receipt of Rs. 34.20 lakh the outgo only on filing fees and payment to advocates and counsels accounted Rs. 33.25 lakh and balance being for small administrative expenses like travelling, etc.

Since the activities of the state council have been predominantly in pursuing legal course, I shall give you in brief the host of petitions concluded, initiated during 2014-15.

#### Case No.92 of 2012 before MERC

This was a suo motu petition of MERC and off shoot of an earlier case no.8 of 2012 on open access for 2012-13 and 2013-14 emanating from issuance of certain circulars by MSEDCL. Case No.92 of 2012 initiated by MERC was deciding on policy related aspect for which an order was passed on 07.04.2014. Mainly the order for the first time stipulated a banking charge of 5% which never got implemented.

#### Case No.96 of 2013 before MERC

The matter was with respect to non signing of PPA by MSEDCL for financial year 2013-14 and was before MERC. The matter was pursued at the behest of handful of members. When the hearings were in the last stage, MSEDCL was successful in forcing a number of developers who are not members of the association to execute the PPA with conditions like right of first refusal after expiry of 13 years of PPA and payment of generation proceeds from April 2013 to September 2013 only when it is able for them and that too without interest. It was very unfortunate that the said developers choose to execute the PPA with the contentious conditions having no approval from MERC and this resulted in MERC rejecting the petition vide order dated 20.06.2014 for the reason that majority have signed the PPA. As legal aspects ought to be analyzed as per the applicable provisions and the regulations issued there under and not on the basis of democratic norms of majority and minority, the order has been challenged before APTEL and same is in process for year and a half and the next hearing is slated for 25.09.2015.



*3<sup>rd</sup> National Council Meeting in session*

#### **Appeal No.210 of 2014 before APTEL**

The appeal filed by IWPA MSC before APTEL with respect to MERC order of 24.06.2014 on MSEDCL's insistence on PPA containing contentious clauses of right of first refusal, etc. has been in progress for more than a year. Since the order passed by MERC is not on sound legal footing but adopted the concept of majority / minority we are hopeful that APTEL would reverse the decision of MERC and the handful of affected members would stand benefitted.

#### **Case No.72 of 2014 before MERC**

MSEDCL as usual without any authority usurping the powers of MERC had uploaded a new revised procedure for open access for wind power which made it mandatory that only a consumer can apply for open access and not a generator, sourcing of power from multiple generators not permissible, etc. Your association successfully challenged the revised procedure and an order was issued by MERC on 20.08.2014 unambiguously stating that the revised procedure is not in consonance with EA, 2003.

#### **Case No. 9 of 2015 before MERC**

Since MSEDCL did not comply with order dated 20.08.2014 of MERC, your association has to file a contempt petition 179 of 2014 before MERC. Since MERC called for issues with respect to specific members to be highlighted, a new petition as case no.9 was filed. The Judgement was reserved on 23.03.2015. Immediately thereafter APTEL issued an order dated 22.04.2015 with respect to solar power developers where they held that sourcing of power from multiple

generators is permitted as per Electricity Act and hence cannot be curtailed. Consequently to take the APTEL order on record, MERC fixed a new date for the hearing and on which date MSEDCL stated that they have appealed the Supreme Court against APTEL order. Since then copy of appeal to the Supreme Court have been submitted by MSEDCL to MERC with copy to the association and as directed by MERC their stand on the matter and our rejoinder too have been filed. It is expected that MERC would issue an order shortly. It is pertinent to note in this imbroglio few members have not realized a single penny from April 2014 onwards. This is to highlight the high handed approach of MSEDCL and easily one could gauge what is in store for many members especially when their PPA stands expired in 2017.

#### **Writ petition no. 2318 of 2014 before Bombay High Court**

MERC issued a new Distribution Open Access Regulations, 2014 and made it effective from 25.06.2014. This was issued when Case no.72 of 2014 was still in progress. In case no.72 of 2014 at the hearing on 19.06.2014 MERC had pulled up MSEDCL for having issued certain revised procedure which are containing clauses contrary to the provisions of EA, 2003. However, it is a paradox that MERC issued new Distribution Open Access Regulations containing almost all the contentious clauses in the revised procedure for open access of MSEDCL which has been earlier held by them to be not confirming with EA, 2003 and orders passed by them.

Draft Regulations placed for public comments was in 2011 and 2013 but never contained the contentious clauses incorporated in new Regulations of 2014.



The contentious clauses include restricting the availability of open access to consumers to purchase power from multiple generators; eligibility being minimum power available at all times to be 1 MW which is not feasible in respect of infirm wind power and in fact as per Act it is maximum of 1 MW at any time; compulsory reduction in contract demand to the extent of plant load factor assumed in the new tariff regulations of MERC; negating banking, etc etc.

Consequently as per legal advise a writ petition was filed in Bombay High Court against MERC and MSEDCL. Tata Power and Reliance Energy joined the fray as affected Distribution Licensees and apparently more a show of brotherhood with MSEDCL.

Indian Electricity Exchange filed a separate writ petition as the new regulations negated day ahead trading.

Also Wind World who is a member of IWPA instead of being part of petition of IWPA choose to file a separate petition. Also Renewable Energy Forum, Kolhapur filed separate petition.

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.

Judgment is awaited as the arguments have been completed on 12.08.2015.

As a surprise festival package on the night of 16.09.2015 MERC has issued a new draft Distribution Open Access Regulations for 2015 seeking comments from all stakeholders

They are:

Sl. No	Name	Company	Designation	Post in IWPA MSC
1	Shri G N Kamath	Karma Energy Ltd	Managing Director	President
2	Shri C L Kale	Savita Oil Ltd	President	Vice President
3	Shri Pradeep Gupta	Powerica Limited	Head (Wind Energy)	Council Member
4	Shri Santosh Tupe	Serum Institute of India Ltd.	Sr. Manager - Projects	Council Member

and the said regulation virtually accepts all the contentions of your association stated in the writ petition before the High Court of Bombay.

Continuing the exhortation of the President, I appeal to all the members to take up issues before regulatory authorities, state utility, etc through the association instead of individually furrowing on the matter unless the issue is unique only for them; continue to contribute your share of the legal expenses as and when called for by the Association. In the absence of funds, legal matters cannot be pursued and in such a stage the functioning of the association itself would be a question mark.

With these few words, I am concluding my address on the status of activities of the Maharashtra State Council for the year 2014 -15

#### 4. Election of the Office bearers and Council Members:

The Election results of the Maharashtra State Council were announced by the Chief Executive. The Proceeding are given below:

As per our Bye laws, one third members have to retire every year in rotation and the vacancies are to be filled by conducting an election. Hence five vacancies were notified in the AGM notice. In response we were in receipt of 4 Nos. nominations and they are found to be valid. Hence all the 4 members stand elected unanimously.

Their term of office will be 3 years.

The full complement of the Maharashtra State Council is

Sl. No	Name	Company	Designation	Post in IWPA MSC
1	Shri G N Kamath	Karma Energy Ltd.	Managing Director	President
2	Shri C L Kale	Savita Oil Ltd.	President	Vice President
3	Shri Arvind Prasad	Ushdev Power Holdings	Managing Director	Secretary
4	Shri Avinash P Rao	CLP India	Deputy General Manager	Treasurer
5	Shri Ashish Tiwari	Energion Power Resources Pvt Ltd.	Director (Operations)	Council Member
6	Shri Chintan Shah	Suzlon Energy Ltd.	Vice President	Council Member
7	Shri Hari Asnani	Indo Wind	General Manager (Marketing)	Council Member
8	Shri Lalith Prakash	IL&FS Wind Power Service	Chief Operating Officer	Council Member
9	Shri Pradeep Gupta	Powerica Ltd.	Head (Wind Energy)	Council Member
10	Shri Prakash Shinde	B F Utilities	Asst. Manager	Council Member
11	Shri Pratap B Salunkhe	Sai Windfra Projects	CMD	Council Member
12	Shri Rahul Hirve	The Tata Power Co Ltd.	Manager (Wind Resource Analysis)	Council Member
13	Shri Santosh Tupe	Serum Institute of India Ltd.	Sr. Manager - Projects	Council Member

Shri G N Kamath, President of Maharashtra State Council proposed the Vote of Thanks.

An investor's meet followed the AGM. Shri G N Kamath welcomed the gathering. Dr. Pramod Deo was the Chief Guest. A brief of the Chief Guest's speech is as follows.

Honorable Prime Minister Modi's Government has fixed a target of 175 GW by 2022 for renewable energy. This is a real challenge. Renewable Energy is not unreliable but requires forecasting. Forecasting is part and parcel of wind energy. Expenses for this has to be shared by all stake holders. Wind contributes sizably for meeting the evening peak loads. Next to forecast is the infrastructure like lines and sub-station which should be ready ahead of installation of wind mills. Interstate availability of lines is very important. One other issue with wind is competitive bidding. But preferential tariff is necessary for wind energy for some more time.

Then our chairman shared his experience in Tamil Nadu. He said that around 30% of wind energy was not evacuated in Tamil Nadu for the past 2 to 3 years. Hence we joined together and arranged for total forecast for the entire state by a project funded by IWPA and executed by NIWE. Now NIWE is able to provide 15 minute forecast for the next 5 days. SLDC says forecasting is helpful to them and they are happy with it. Sri G N Kamath also endorsed the views of our chairman and he said that forecasting on a larger area preferably state level will be more accurate than forecasting of individual wind farms.

Sri Parvathinathan proposed the Vote of Thanks.

## IWPA's comments on APERC Wind Tariff Regulations 2015-19 and Wind Tariff Order 2015-16



02<sup>nd</sup> September 2015

To,

The Secretary,  
Andhra Pradesh Electricity Regulatory Commission (APERC),  
4<sup>th</sup> Floor, 11-4-660, Singareni Bhavan, Red Hills, Hyderabad -500004,

Respected Sir,

**Subject: Indian Wind Power Association (IWPA) submission to APERC on its recently notified Wind Tariff Regulations 2015-19 and Wind Tariff Order for FY 2015-16.**

We would like to introduce our self as the Indian Wind Power Association (IWPA) which was set up in 1996 as a non-profit organization. The association is having more than 1352 members spread all over India. Since its inception it has worked consistently, towards removing barriers to wind power development and creation of an enabling regulatory and policy environment for investments in this sector.

At the onset, we express our sincere gratitude and appreciation, for the encouragement given to renewable energy (RE) projects in the newly formed state of Andhra Pradesh.

The recently announced Wind Power Policy 2015, was considered to be one of the most favourable and best wind power policy in the country and started attracting investors and developers to invest and develop large scale wind power projects in the state. The referred policy has visualised an addition of 4000 MW of wind power capacity in the next 5 years.

In order to achieve the above target it is very important that the state will have a compensatory feed in tariff so that it will encourage the investor and developer community to harness the wind power potential of the state which is close to 15000 MW.

The Honorable Commission has issued Regulation 01/2015 in the matter of determining "Terms and Conditions for Tariff determination for Wind Power Projects in the state of Andhra Pradesh for the period FY 2015-16 to FY 2019-20" on August 01, 2015 the Commission also notified wind tariff for FY 2015-16 at Rs. 4.83/unit for projects not availing Accelerated Depreciation benefit and Rs. 4.25/unit for projects availing Accelerated Depreciation benefit with MAT/Income Tax as a pass through and the developer can reimburse the same from the distribution utility.

As a key stakeholder in the development of renewable energy in Andhra Pradesh, we would like to bring following issues before the Honorable Commission which have not been addressed in the aforesaid order.

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### Indian Wind Power Association - Andhra Pradesh State Council

No. 6-2-1012, 2<sup>nd</sup> Floor, TGV Mansion, Opp. The Institution of Engineers, Khairatabad, Hyderabad - 500 004  
Ph: 040 2331 3842, 6666 5676 | Fax: 040 2331 3875 | E-mail: iwpaap@gmail.com | Website: www.windpro.org



## Capital Cost and Capital Cost Indexation Mechanism

The Honorable Commission in the draft regulation has stated that *"The capital cost for the base year i.e., 2015-16 shall be specified by the Commission consistent with its earlier orders dated 15-11-2012 and duly taking into account the capital indexation mechanism of CERC as prescribed in CERC RE Tariff Regulations 2012."*

The Hon'ble Commission justified the above proposition as follows in the draft regulation:

*"The Commission is of the view that the capital cost determined with this escalation methodology would be closest to actual market values, as it takes dynamic indices into consideration. Therefore the Commission adopts the escalation methodology as suggested by CERC and is detailed below."*

The Honorable Commission in its previous wind tariff order dated November 15, 2012 has considered capital cost of Rs. 575 lakhs/MW for wind power projects, applying the capital cost indexation mechanism as specified in the CERC Tariff Regulation 2012, the capital cost for FY 2015-16 comes to be Rs. 619.52 lakhs/MW.

Even the final regulation notified by the Hon'ble Commission provides for computation of the capital cost for the subsequent years on the basis of indexation mechanism prescribed in CERC regulations 2012. Thus there is no justification for deviating from this methodology in determination of capital cost for FY 2015-16 with reference to the capital cost specified in 2012.

In any case, this Hon'ble Commission ought to have published draft Tariff Order with capital cost of Rs.600 lakhs/MW for FY 2015-16, and sought the views of stake holders as required under scheme of EA 2003 for tariff determination by the Commissions under section 62 read with Sec 61 and 64 of EA 2003 and also as per the principles of Natural Justice.

The Honorable Commission in the draft regulation has stated

*"The norms for the Capital cost shall be generally inclusive of all capital work including plant and machinery, civil work, erection and commissioning, financing and interest during construction (IDC) and evacuation infrastructure upto inter-connection point."*

The definition of interconnection point defined in the aforesaid regulation is as follows:

*"Inter-connection Point' shall mean the line isolator on outgoing feeder on HV side of the pooling sub-station; wherein*

*the pooling sub-station shall mean the sub-station at project site of wind farm and shall constitute step-up transformer and associated switchgear and to the LV side of which, multiple (more than one) generating unit (s) (i.e., wind turbine generators) are connected;"*

The Commission in the final regulation has missed to include the interconnection point and has derived capital cost which is inclusive of evacuation cost.

*"The norms for the Capital cost shall be generally inclusive of all capital work including plant and machinery, civil work, erection and commissioning, financing and interest during construction (IDC) and evacuation infrastructure"*

It is noticed from the proceedings dated 23-7-2015 of this Hon'ble Commission that the capital cost of Rs.600 lakhs includes evacuation cost as per GOAP policy, which covers evacuation facility up to grid substation of state transmission utility (STU). This is farfetched and is totally prejudicial to the object of promotion of Renewable Energy mandated under section 61(h) and 86(1)(e) of EA 2003 as explained in subsequent paras hereunder.

GOAP policy is contrary to the provisions of EA 2003 in respect of collection of cost of evacuation arrangements from wind generators. Many State Commissions including APERC have earlier deviated from the State Government policies which are not in line with intent and objects of EA 2003, especially in respect of tariff matters which are in exclusive domain of the Regulatory Commissions (eg: No Banking facility in the old policy)

Hence in order to avoid ambiguity, we request the Honorable Commission to specify the scope of capital cost of wind power projects under this regulation as inclusive of evacuation cost till interconnection point in line with CERC regulations and in compliance of the provisions of Sec 61(a), (h), and 86(1)(e).

Thus we pray before the Hon'ble Commission to specify Rs. 619.52 lakhs/MW as the capital cost for wind power projects till interconnection point for FY 2015-16 which is also in line with CERC RE Tariff order for FY 2015-16 dated March 31, 2015, and also specify the scope of the elements covering the capital cost up to inter-connection point, in exercise of the powers vested in it under clauses 22 and 23 of the said regulation or otherwise.

Further, we also would like to bring to the kind notice of the Honorable Commission that Wind power projects are generally located at remote places, and the project sizes often being commissioned after the entry of large IPPs is in the range of 50 MW and above which warrants construction of substations

and transmission lines at 132kV and 220kV level. APTRANSCO being the STU is required to develop this infrastructure as a statutory function U/s 39 of EA 2003. But the STU and DISCOMs are insisting for creating this infrastructure by Wind Power Developers as a result of which the developers incur huge cost to build the evacuation infrastructure. This insistence is contrary to the provisions of the Act and also contrary to the principles and methodologies specified by CERC in its RE tariff regulations 2012, which are required to be followed by State Commissions as per Sec.61 (a) of EA 2003.

This Hon'ble Commission has rightly defined the inter-connection point in clause 2(g) of Regulation no.1 of 2015 as quoted above, which is in line with CERC regulations, 2012 and is also in line with the promotional measures mandated U/s 86(e) of EA 2003. . Thus, even as per the definition of inter-connection point under clause 2(g) of Regulation no.1 of 2015, the STU has to provide transmission of power beyond the inter-connection point.

Hence we request this Hon'ble Commission to issue necessary practice directions in exercise of powers under clause 24 of Regulation no.1 of 2015, directing the state transmission utility to plan for evacuation arrangements beyond inter-connection point well in advance and commission the same duly coordinating with the wind power developers. However, if STU desires to entrust this task to Developers for timely provision of the evacuation facility, STU may be directed to reimburse the cost which the developer incurs for constructing the evacuation network from the inter-connection point to grid substation.

We would also like to request the Commission to determine the following constants in line with CERC RE Tariff Regulation 2012.

a = Constant to be determined by Commission from time to time, for weightage to Steel Index

b = Constant to be determined by Commission from time to time, for weightage to Electrical Machinery Index

F1 = Factor for Land and Civil Work

F2 = Factor for Erection and Commissioning

F3 = Factor for IDC and Financing Cost

### Capacity Utilization Factor (CUF)

The Honorable Commission in the draft regulation has considered CUF at 23%, by duly examining the CUF adopted by CERC and other State Commission. The Commission has also **noted that**

**only low wind density sites are presently available in the State**, based on the same the Commission has stated:

*"It is also observed that with the advancement of technology and infrastructure facilities, the present trend in the industry is to install machines with hub heights of 80 meters and above in view of higher wind power density at higher elevations. As such the CUF of 23% is proposed to be retained for wind energy projects in Andhra Pradesh"*

The Commission in the final notification have taken 23.5% as CUF based on evidence given by distribution utility during the public hearing that post 15-11-12 order about 19 developers with total capacity of 173.6 MW have entered PPA with distribution utility and CUF achieved by them is 24.79%.

We would like to bring in kind attention before the Honorable Commission that the total wind power capacity installation in the state post 2012 order is around 770 MW:

- FY 2012-13: 202 MW
- FY 2013-14: 283 MW
- FY 2014-15: 285 MW

The state also has not much of the capacity under third party hence majority of the power is being sold to discom at Rs.4.70/unit, hence discom hand picking only those sites which have performed better during last year would not be correct, further the distribution utility have only considered 1 year data however the useful life of the project is 25 years

We would also like to submit that the reason for the above projects achieving higher CUF is because of better technology of WTG and the capital cost for the same is very high. In June 2012, Indian Wind Power Association has filed an application under Right to Information from NREDCAP seeking information with regards to Wind farms operational in Andhra Pradesh under which we got the following details about project cost incurred by NREDCAP

Cost of NREDCAP project installed during 2011-12 at Rekulakunta, Anantapur district

- Capacity of project – 5.95 MW
- Total project cost including 5 years O&M – Rs. 35,42,55,365
- Cost/MW (including 5 years O&M) – Rs. 5,95,00,000
- Cost/MW (excluding O&M) – Rs. 5,65,00,000

The above project cost is exclusive of land cost and additional cost towards arranging the standby meter.

Cost of NREDCAP project installed during 2011-12 at Kondamedapalli, Kurnool district is as follows

- Capacity of project – 1.60 MW
- Total project cost including 5 years O&M – Rs. 9,86,98,250
- Cost/MW (including 5 years O&M) – Rs. 6,17,00,000
- Cost/MW (excluding O&M) – Rs. 5,91,00,000

The above project cost is exclusive of land cost and additional cost towards arranging the standby meter.

The copy of the said letter is attached as Annexure – I

During 2011-12 period the capital cost which the Honorable Commission has determined was Rs. 4.70 crores/MW under O.P. No. 7 of 2009 wind tariff order dated May 01, 2009, however as can be seen above, the cost of wind power projects developed by NREDCAP in 2011-12 are Rs. 5.66 crores/MW and Rs. 5.91 crores/MW which is exclusive of land cost, O&M cost, statutory payments and additional cost towards standby meter. It is also pertinent to highlight the fact that both these projects were connected directly to the existing substations at 33kV level and didn't involve any major modifications at either of the substations where the projects are connected and thus there was no sizeable investment done on the evacuation network.

The Honorable Commission in its last wind tariff order has determined capital cost for wind power projects at Rs. 575 lakhs/MW, we would like submit a Chartered Accountant certified copy of the detailed breakup of various cost incurred by a Wind Independent Power Producer one of the member of our association in setting up their 63 MW wind power project in Vajrakarur in the state of Andhra Pradesh in 2012 for which the capital cost incurred was Rs. 633 lakhs/MW (project cost details enclosed in Annexure – II).

Also we would like to submit the detailed project cost break up of Burgula wind power project of 37.4 MW for which the capital cost comes to be Rs. 693 lakhs/MW (project cost details enclosed in Annexure – III).

With the rise in electrical machinery and steel indices the current capital cost will be around Rs. 7.5 crores/MW

The Honorable Commission in its last wind tariff order dated 15<sup>th</sup> November 2012, have determined CUF for the state after perusing the NIWE wind power density map and also considering NREDCAP submission based on which the Honorable Commission has established that most of the sites available in AP are in the range of 200-250 W/m<sup>2</sup>, hence in order to encourage efficiency and optimal selection of sites the Commission has adopted 23% CUF.

Hence we request the Honorable Commission to consider CUF at 23% for the wind power projects under the aforesaid regulations.

## Operation and Maintenance

The Honorable Commission in the draft notification has considered O&M cost at 1.25% of the capital cost with an escalation of 5.72% on annual basis, however in the final tariff notification for FY 2015-16 the O&M expenses as determined in 2012 wind tariff order of Rs.7.4 lakhs / MW has been escalated at 5% for subsequent years to derive at Rs. 8.57 lakhs / MW as the O&M for FY2015-16, which shall be escalated at the rate of 5.72% thereafter.

We would like to bring in kind notice of the Honorable Commission that Axis Energy has filed a review petition under which it has challenged O&M cost of Rs. 7.4 lakhs/MW considered by the Honorable Commission in its last wind tariff order dated November 15, 2012 this has been pending before the Honorable Commission for its judgment. Hence to consider base of Rs. 7.4 lakhs/MW and escalating at 5% for subsequent years to derive Rs. 8.57 lakhs/MW will not be correct.

We would also like to bring it to the kind notice of the Honorable Commission that CERC in its CERC RE Tariff Regulation 2012 has considered 9 lakhs/MW as O&M cost for FY 2012-13 and on that it has applied an escalation of 5.72% on annual basis, based on which the O&M cost for FY 2015-16 comes out to be Rs. 10.62 lakhs/MW. So we request this Honorable Commission to consider the same O&M cost for the wind projects to be commission in FY 2015-16 in Andhra Pradesh.

We would also like to draw attention of this Honorable Commission, to a recent judgement passed by the Honourable Appellate Tribunal of Electricity on Appeal No. 11, 49 and 82 of 2014 dated November 25, 2014 in the matter of Appeals filed by Indian Wind Power Association (IWPA), Indian Wind Turbine Manufacturer's Association and Guttaseema Wind Energy Co. Pvt. Ltd challenging the Wind Tariff Order dated Oct 10, 2013 passed by Karnataka Electricity Regulatory Commission (KERC) have passed a judgement stating:

### “Operation and Maintenance Expense

*We find that in the impugned order the State Commission has followed the same norm of 1.25% for O&M expenses as decided in the previous tariff order. However, in the impugned order, the State Commission has fixed the capital cost of 5.6 crores/MW. Calculating @ 1.25%, this would give O&M cost of Rs. 7 lakhs/MW. The State Commission is guided by the Central Commission's Regulations. However, in the present case, the State Commission has decided O&M cost different from that specified in the*



*Central Commission's Regulations without giving any reason. We, therefore, remand the matter to the State Commission to reconsider and if it is adopting value different from the Central Commission's Regulations, it should give proper reason for the same. Accordingly ordered."*

In pursuant to above KERC has passed a judgement in the matter of determination of tariff for Wind power projects on February 24, 2015 under which the KERC has passed the following ruling in relation to Operation & Maintenance cost

#### **"Operation and Maintenance Expense**

*O&M expenses vary with the type and location of the plant besides its vintage. Considering the views expressed by the stakeholders and the data furnished by IWPA, the Commission decides to adopt O&M expenses as per CERC Regulations.*

*Hence, the Commission decides to consider O & M expenses of Rs.9.51 lakhs / MW for the year 2013-14 to be escalated at 5.72% over the tariff period to compute the levelized tariff."*

Therefore we pray before this Honourable Commission to consider O&M cost of Rs. 10.62 lakhs/MW for FY 2015-16 with an escalation of 5.72% annually which is in line with CERC RE Tariff Regulation 2012 and also with the aforesaid mentioned Appellate Tribunal judgement while determining the new wind tariff for the state of Andhra Pradesh.

#### **Return on Equity**

The Honorable Commission has determined normative Return on Equity at 16% with MAT/ Income Tax as pass through.

We would like to bring in kind attention before the Honorable Commission that Appellate Tribunal of Electricity (APTEL) has passed a judgment on Appeal no. 174 of 2009 in the matter petition filed by Tata Power Company Ltd. against Maharashtra Electricity Regulatory Commission on February 14, 2011. The excerpts from the said judgement is as follows:

*"While the State Commission has computed the tax by considering the Return on Equity equal to profit before tax, it has ignored the fact that such allowed income tax would also be considered as revenue gains and the Appellant would have to pay tax on the same. In order to rectify the same, the State Commission ought to have grossed up the tax computed by it and pass the same to the Appellant. Thus the claim of the State Commission that it has reimbursed the actual tax and hence there is no case for allowing post tax Return on Equity is not correct.*

*Therefore, it would be appropriate to direct the State Commission to compute income tax entitlement of the Appellant by replacing*

*Return on Equity by regulatory profit before tax on the basis of income less permissible expenses."*

APTEL on March 23, 2010 has passed another judgment on Appeal No. 68 of 2009 in the matter petition filed by Torrent Power Ltd against Gujarat Electricity Regulatory Commission, the relevant excerpts of the said order is reproduced below:

*"We set aside order of the State Commission in this view of the matter and direct that it allows the income tax by grossing up to ensure the stipulated post tax return by the State Commission to the Appellant."*

The APTEL has referred these judgments in the subsequent cases also on April 17, 2013 APTEL has passed a judgment on Appeal No. 75 of 2012 in the matter of petition filed by Solar Energy Society of India against GERC and Gujarat Urja Vikas Nigam Ltd (GUVNL):

*"The State Commission should have followed the principle of grossing up of the income tax as decided by this Tribunal in Appeal no. 174 of 2009, 68 of 2009 and Review Petition no. 9 of 2010 in Appeal no. 68 of 2009. Accordingly, directed."*

CERC on 21st February 2014, has notified CERC (Terms and Conditions of Tariff) Regulation 2014 which will be applicable to all interstate generating stations, there also in the Statement of Reasons the Central Commission has given a detailed reasoning of why it has considered pretax Return on Equity:

*"The Commission observed that various stakeholders have suggested to retain the existing pre-tax return on equity approach. On the other hand beneficiaries have suggested that utilities should recover income tax from their profit and not separately from the beneficiaries. The Commission has analysed the suggestions and observations received from various stakeholders and observed that both the approaches have their own merits and demerits. However, the major disadvantage, which the Commission envisages in implementation of post-tax approach is the incremental effect of income tax liability, which will arise as the reimbursement of income tax shall again be considered as income in the hands of the generator/licensee and the same will defeat the entire purpose of adopting this approach. Thus, with due regard to the suggestions of the stakeholders and the complexities involved in computing income tax liability, it will be appropriate to retain the existing pre-tax rate of return approach. In order to pass on the benefits and concessions available in income tax, the income tax rate to be considered for grossing up purpose shall be Minimum Alternate Tax (MAT) rate, if the generating company, generating station or the transmission licensee is paying MAT, or the effective Tax Rate, if the generating*

*company or the transmission licensee is paying income tax at corporate tax rate. Accordingly, the Commission has decided to allow pre-tax rate of return on equity which shall be grossed up with the effective tax rate of the financial year or MAT rate and the tax on other income stream will not be considered for the calculation of the effective tax rate."*

We would also like to bring it to the kind notice of the Honorable Commission that in its previous wind tariff order dated November 15, 2012 the Honorable Commission has considered Return on Equity of 20% pre-tax for the first 10 years followed by 24% pre-tax for 11th year onwards on the lines of CERC RE Tariff Regulation 2012.

In order to maintain consistency we request the Honorable Commission to adopt the same methodology i.e. 20% pretax RoE for the first 10 years and 24% pretax RoE from 11th year onwards this will be in line with CERC RE tariff regulation 2012 and also with various APTEL judgments stated above.

## Rebate Mechanism

The Honorable Commission has considered 1% rebate on the billed amount if the distribution utility pays to the developer within 1 month from the presentation of bill.

We request the Honorable Commission, not to deduct any rebate for early payment as it effectively reduces the net tariff to be realized by the wind power project developer. However where the payment is secured by way of an LC the developer can bear the charges associated with opening an LC in its favor.

The Honorable Commission can come up with a methodology in which different slabs in terms of no. of days which can be 10 days, 20 days and 30 days from the presentation of bill and the distribution utility rebate will depend on which slab they are doing the payment hence the Commission can accordingly redefine the rebate mechanism.

## MUST RUN Status

The Honorable Commission has stated that all wind power projects shall be treated as MUST RUN and shall not be subjected to Merit Order dispatch principle, however for project size of 10 MW and above shall be subjected to IEGC 2010 and/or AP State Electricity Code as amended from time to time.

We would like to bring in kind attention before this Honorable Commission that as per the recently notified AP Wind Power Policy 2015, wind power projects in the state of Andhra Pradesh shall be treated as MUST RUN:

*"Injection from wind power projects shall be considered to be deemed scheduled subject to prevailing regulations/grid code of appropriate commission."*

Further it has been seen during the peak wind months load shedding/ power curtailment instructions are getting issued on a daily basis for all the wind farms in the Anantapur, Cuddapah and Kurnool districts severely affecting the power production and the revenues from the project as the on-going season is a critical period for us which accounts for 70% of total power production of a wind farm.

We would like to highlight that the state of AP never had the issue of load shedding and this has started only in the present season.

We would also like to bring notice to the Honorable Commission that in a recent AP discoms tender for procurement of 2400MW from coal based power under competitive bidding the highest fixed cost component was Rs. 3.80/unit, which means even if they curtail such power the generator will get Rs. 3.80/unit which secures the financial health of the project.

Sr No	Developer	Plant Location	Capacity (MW)	Fixed Charge (Rs. / unit)	Fuel Charge (Rs. / unit)	Total Tariff (Rs. / unit)
1	East Coast	A.P.	489	2.86	1.41	4.27
2	NCC	A.P.	500	2.56	1.79	4.35
3	Adani Power	C.G.	540	3.50	0.99	4.49
4	MB Power	M.P.	374	3.63	1.06	4.69
5	Jindal India	Odisha	400	3.79	1.04	4.83
6	Essar	M.P.	500	3.80	1.03	4.83

Hence we request the Honorable Commission to consider all wind power projects shall be considered as MUST RUN, further if the project developer is losing out on generation due to unavailability of grid or because of SLDC or APTRANSCO load curtailment then such wind power project shall be compensated considering power to be deemed generated and sold to distribution utility, this mechanism is envisaged under the recently notified Draft Renewable Energy Act 2015 by MNRE.

"Deemed Generation: Provided further that if the grid is not available for power evacuation after the project has commenced generation or is already operational, the power will considered to be deemed generated and sold, with charges being payable

to the RE generator. Detailed guidelines in this respect shall be issued as part of RE Policy”

## Wind Solar Hybrid

We would also like to request the Honorable Commission to determine the tariff for wind solar hybrid projects as these projects offers many advantages over standalone RE projects which includes:

- Improved Land usage
- Shared Evacuation Infrastructure
- Common Operation and Maintenance
- Improved generation profile

In order to encourage the development of wind solar hybrid projects the Commission can determine separate tariff for both wind and solar.

The tariff for wind component may be given as per the prevailing feed in tariff in the state and the tariff for solar component the Commission may determine a separate feed in tariff or make it equal to the highest accepted levelled tariff explored in the last bid of the solar projects in the state. This compensatory tariff mechanism will encourage the developer community to venture into wind solar hybrid projects as this mechanism will provide them back up for generation losses which these projects incur as most of these projects are evacuated above 132 kV and also since these projects will be using common evacuation network so during peak solar and wind season the developer needs to back down either of the two so that over injection won't take place and grid can also be protected.

## Power Purchase Agreement

We request the Honorable Commission that the developer be given the option of either signing the PPA in advance with the discom or allow signing of PPA just before the commissioning of the project enabling them to get the tariff prevailing during the date of achieving COD for the project.

We would also like to pray before the Honorable Commission that the standard draft PPA for wind power projects can be modified in accordance with the wind tariff regulation and can be circulated for stakeholder comments.

At the end we would like to request the Honorable Commission to conduct a public hearing on determination of wind tariff for FY 2015-16 and provide us the opportunity to present and place additional facts and materials.

Thanking you,

Yours faithfully  
For – Indian Wind Power Association (IWPA)

S. Sri Murali  
Secretary – IWPA, AP Chapter

Copy to:

The Secretary to Govt., Energy Dept., Govt. of A.P., Hyderabad  
The CMD, APTRANSCO, Hyderabad  
The CMD, APEPDCL, Vishakhapatnam  
The CMD, APSPDCL, Tirupati  
The VC and MD, NREDCAP, Hyderabad

**Media News**

## Gist of the News item that appeared in the Tamil Daily Dina Thanthi on August 30, 2015

Why does the TANGEDCO not buy the entire Wind Energy generated even during the windy season?

### Wind Mill owners are distressed

During the windy season, when the wind mills are operating at its full capacity, the TANGEDCO does not purchase the wind energy generated in full. The wind energy generators expressed their distress.

There are 11,800 wind mills in Tamil Nadu capable of producing 7480 MW. NIWE, a Central Government organization has forecast that there will be higher generation of wind energy in the coming days.

### Electricity at higher cost

During the high wind season, TANGEDCO permits only half of the wind mills to run backing down the balance.

Instead of buying wind energy @ Rs. 3.12 per unit, TANGEDCO resorts to purchase energy generated by thermal units at more than Rs. 5 per unit from other States.

By not purchasing cheaper wind energy produced in Tamil Nadu, the TANGEDCO is passing on the burden of higher cost to the Consumer.

### Pathetic state of affairs

Investors in wind energy who had hoped for good returns during the windy season, are terribly disappointed and look for better evacuation.



## Status of Legal Cases initiated by the Association on behalf of its Members

Position as on September 25, 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  <b>Appellant</b> : TNEB <b>Respondent</b> : IWPA, MNRE, et al	<u><b>Time value of money:</b></u>  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  <b>Appellant</b> : IWPA <b>Respondent</b> : TANGEDCO, CE NCES, TNERC	<u><b>Levy of O &amp; M charges:</b></u>  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  <b>Appellant</b> : IWPA <b>Respondent</b> : TNERC, TANGEDCO, TANTRANSCO	<u><b>Wind tariff order (No. 6/2012)</b></u>  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; 24 <sup>th</sup> March 2015 W.P. No.7956 of 2015  <b>Appellant</b> : IWPA <b>Respondent</b> : TANGEDCO	<u><b>Scheduling &amp; System Operation Charges</b></u>  Levy of Scheduling & System Operation Charges for sale of energy to TNEB	The levy was stayed which was extended. The case came up for hearing on September 07, 2015. Since TANGEDCO did not file a counter, the case was adjourned till further orders.  The Stay is therefore still in force.

Sl. No.	Judicial Forum with period of Filing	Subject	Status
5.	TNERC; April 2012 MP No. 14 of 2012 <b>Appellant</b> : IWPA, Tata Power Co. Ltd. <b>Respondent</b> : Union of India and others	<b><u>Must run status:</u></b> Association had filed a petition to TNERC to issue a direction bestowing "must run" status to wind energy.	In respect of cases as at Sl. Nos. 5,6 & 7, TNERC had delivered a judgement on July 01, 2015. Since the two members of the TNERC had given different judgements, this matter was taken up to the High Court of Madras by TASMA and a few IPPs. An interim injunction till August 04, 2015 was delivered by the High Court. This has been extended to October 03, 2015.
6.	TNERC MP No. 22 of 2014 (High Court of Madras; August 2013 22420 of 2013) <b>Appellant</b> : IWPA <b>Respondent</b> : Union of India and others	<b><u>Bestow "Must Run" status to wind mills:</u></b> IWPA had appealed to bestow "Must Run" status to all wind mills.	
7.	TNERC MP No. 23 of 2014 (High Court of Madras; August 2013 22421 of 2013) <b>Appellant</b> : IWPA <b>Respondent</b> : Union of India and others	<b><u>Compensation for losses due to back-down:</u></b> 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	
8.	TNERC; April 2012 MP No. 5 of 2012	<b><u>Extension of time for utilisation of banked units:</u></b> 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.
9.	TNERC; February 2013 MP No. 6 of 2013	<b><u>Encashment of banked units:</u></b> 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.
10.	TNERC; April 2012 MP No. 4 of 2012	<b><u>Renewable Power purchase Obligation (RPO):</u></b> 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.

Sl. No.	Judicial Forum with period of Filing	Subject	Status
11.	TNERC; July 2013	<p><u>Interest on delayed payment:</u></p> <p>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</p>	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 yet to be posted.

## ANDHRA PRADESH ISSUES

Sl. No.	Judicial Forum with period of Filing	Subject	Status
1.	TSERC	<p><u>Tariff</u></p> <p>Telangana is a newly formed State and it does not have a tariff for wind. The petition seeks for a favourable Feed-In-Tariff for wind energy.</p>	Hearing is underway. The next hearing is scheduled on November 02, 2015.

## RAJASTHAN ISSUES

Sl. No.	Judicial Forum with period of Filing	Subject	Status
1	RERC	<p><u>Interest on delayed payment</u></p> <p>Members have insisted on interest payment of 15% on the delayed payments as contained in the PPA signed by them.</p>	The next hearing is scheduled on October 08, 2015.

## 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 is scheduled on September 24, 2015.



Sl. No.	Judicial Forum with period of Filing	Subject	Status
2	IWPA MSC petition 9 of 2015 filed for non compliance of MERC Order 72 of 2014 dated 20.08.2014	<p>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.</p> <p>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.</p>	<p>The matter heard on 10.02.2015 and finally on 23.03.2015 and order reserved.</p> <p>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.</p> <p>In the meantime MERC again heard the matter as a follow up of the APTEL Order on August 06, 2015 and August 27, 2015. In the last hearing MERC directed MSEDCL to process the OA application by September 10, 2015 as there is no stay on APTEL order and both the parties to file compliance by September 15, 2015. However, MSEDCL has filed a written submission on September 14, 2015. The reply is being filed within a week's time.</p>
3	Writ Petition No.2318 of 2014 before Bombay High Court	<p>The Distribution Open Access Regulations, 2014 issued by MERC is having following major shortcomings as per IWPA MSC</p> <p>No public hearing was held before issuance of Regulations</p> <p>Draft Regulations placed for public comments in 2011 and 2013 never contained the contentious clauses incorporated in new Regulations of 2014.</p> <p>Restricts the availability of open access to consumers to purchase power from multiple generators.</p> <p>Calls for minimum power available at all times to be 1 MW which is not feasible in respect of infirm wind power.</p> <p>Compulsory reduction in contract demand to the extent of plant load factor assumed in the new tariff regulations of MERC.</p> <p>Submitting copy of PPA with open access consumer while applying for open access approval to the Distribution Licensee.</p>	<p>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.</p> <p>Tata Power and Reliance Energy have joined the fray as affected Distribution Licensees.</p> <p>Indian Energy Exchange has filed a separate writ petition and the same is being heard independently.</p> <p>Also Wind World (India) Ltd. Who is a member of IWPA and Renewable Energy Forum, Kolhapur have filed separate petitions.</p> <p>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.</p> <p>The hearings are in full swing and was heard virtually for full day on 24.07.2015, 31.07.2015 and 06.08.2015.</p> <p>Judgement reserved in the hearing held on August 27, 2015.</p>

# Renewable Energy News Digest

## Government developing framework for repowering wind farms: Piyush Goyal

September 12, 2015



Piyush Goyal, Minister for Power, Coal, and New and Renewable Energy

With a view to ensure better capacity utilisation of wind energy projects, the Union Power Ministry is developing a framework for repowering wind farms from 200-300 watt units to 2-5 MW that are available in the market, Minister for Power, Coal, and New and Renewable Energy, Piyush Goyal said at an Assocham event held in New Delhi on Friday night.

"I am looking at ways to get repowering done, I know the challenges of new wind sights or getting land, we are trying to get squatters out of the land which they are squatting on but not implementing projects and we are talking to states to create a more robust framework," said Mr. Goyal while addressing an industry interactive session on renewable energy sector organised by the Associated Chambers of Commerce and Industry of India (Assocham).

He also informed that the government plans to use off-grid power generation in certain villages, according to a press release from Assocham.

"We are creating a framework that whenever the grid reaches there, the off grid guy can supply that power like net metering into the grid, so we are creating that framework to encourage people to go off grid," said Mr. Goyal.

### Discom resolution

Talking about the discom resolution, Mr. Goyal said, "We are not only ceased of it but we are working relentlessly on a daily basis to fine tune and refine our proposals on that without giving any subsidy again or any grant/additional money (to the States)."

"Discom resolution is on the cards and we are very confident to have been able to create a sustainable robust framework in consultation with states," said Mr. Goyal.

He also said that the government was finalising the contours of power tariff policy. "We are reviewing the tariff policy and very soon we will be taking it to the cabinet, it has very exciting features for the renewable energy sector.

Mr. Goyal also said it is imperative to make the renewable energy sector self-sufficient and self-reliant by cutting back on subsidies. "Subsidy for the renewable energy sector is a sensitive issue, ideally now time has come we should move out of the subsidy."

The Minister also said that government plans to bring down the cost of each LED bulb to Rs.44 from a level of Rs.74 through competitive bidding.

### Hydel power sector

Talking about the slow progress of hydel power sector, Mr. Goyal said at the event that he had been able to get the Rs.9,000 crore worth Teesta power project back on line and with work expected to start soon it is likely to come on stream in a year's time.

He also asked the industry associations to work in the national interest and not to become postman for scamsters or those following bad business practices.

### Renewable energy sector

Talking about the poor progress of renewable energy sector in India, Mr. Goyal said, "Effectively, what I inherited was a situation where the industry had almost given up hope, you had anti-dumping looming large on solar industry, wind industry was crumbling in the back of withdrawal of certain fiscal benefits, bagasse based plants were almost dead or sick, small hydel was already over."

## Centre, States to de-stress discoms

Power and Coal Minister Piyush Goyal said on Tuesday that the Centre is working in collaboration with states to find out a permanent solution to make stress of discoms a “thing of the past”.

“The Centre is handholding them and supporting them in various ways to ensure that together we don’t look at the short-term solution to this problem (of ailing discoms),” the minister said. He further said that the government is committed to finding a permanent solution of the discom problem and “I am delighted that all the states uniformly have supported our ideas”. The minister had recently held meetings with chief secretaries of the states on power issues, including ailing discoms.

“We had very good meetings. The states and the Centre are working together as one. The states are also conscious of their responsibilities,” he said.

He said that in two to three years, the discom distress would become a thing of the past.

He had earlier said that the Centre cannot be considered as a bailout bank for helping debt-ridden power distribution companies, and the states will have to find a way out of the crisis. The combined debt of power distribution firms (discoms) stands at over ₹3 lakh crore. Faced with acute financial stress, many of these are unable to buy power.

## Working on a permanent solution to discoms’ debt problem: Goyal

### Power Minister rules out bailout package

NEW DELHI, SEPTEMBER 15:

The Power Ministry is working on a mechanism to help reduce the debt of state electricity distribution utilities, said Piyush Goyal, Minister for Power, Coal and New & Renewable Energy, on Tuesday. The mechanism is to be finalised soon.

“We have had an extensive meeting with state chief secretaries on Saturday. The States and the Centre are working together as one. The States are also conscious of their responsibilities,” said Goyal.



Ambitious goal Power Minister Piyush Goyal says he wants to bring down the losses of power distribution utilities in the next 2-3 years

The minister added that he aims to bring down the losses of distribution utilities in the next 2-3 years. Officials of state electricity distribution utilities also had a meeting with Prime Minister Narendra Modi on Monday.

Estimates suggest the combined debt of distribution utilities stands at over ₹3 lakh crore. However, Goyal has ruled out a bailout package and said that the government is committed to finding a permanent solution to the problem.

The Minister was inaugurating the National Biogas Convention, 2015. During his address, Goyal said the fastest way to provide energy to the last mile is decentralised power production across the country.

### Renewables commitment

Goyal emphasised that the Ministry of New & Renewable Energy remains committed to all forms of renewable sources of energy, including biogas.

“Biogas offers an important solution to the present energy crisis in rural areas. Besides being a clean and important source of energy for cooking, it is an environmentally green and clean technology,” the minister pointed out.

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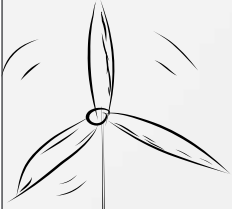
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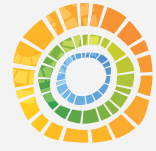
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