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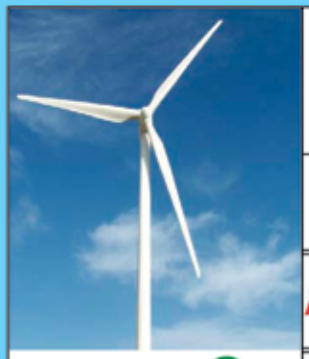

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From the Chairman's Desk

Dear Friends

Stakeholders Meeting organized by NITI Aayog at Bengaluru: Members may be aware that NITI Aayog has replaced the Planning Commission. NITI Aayog has set a target to achieve 40% non-fossil energy in the country and a 30% reduction of carbon emission by 2030. A Stakeholders' Consultation Workshop on Renewables and Nuclear Power was organized by NITI Aayog at Bengaluru on October 13 & 14, 2015 wherein IWPA participated.

Speaking on the occasion Ms. Varsha Joshi, the JS, MNRE mentioned that the State level forecasting has given valuable inputs and now we should focus on ways to absorb more wind energy by strengthening Balancing Mechanism and Regulatory interventions.

While participating in the discussion, IWPA had mentioned that any development of wind sector in the country is related to how best evacuation is carried out in States like Tamil Nadu. The Return on Investment is directly related to evacuation. IWPA further suggested that to improve evacuation the annual maintenance work of Thermal Stations should be taken up during high wind season and the Thermal stations should be operated at technical minimum whenever necessary. To manage wind optimally, the Balancing & energy storage needs to be increased. IWPA is in discussion with SRPC in this regard.

During the discussion with stakeholders, an idea was mooted that the Government should declare wind and solar energy as National Assets and evacuation of energy from these RE sources be mandatory with deemed generation benefit. This suggestion was given with the hope that wind and solar energy are not wasted in the untenable grounds of grid safety as is presently being done. The backing down in Rajasthan and Tamil Nadu stands testimony to this wastage. But the flip side of declaring wind and solar as National Assets is that it could lead to investors in wind energy being taxed for using a National Asset ! We have seen what has happened with water. First it is polluted, then the fear of "water borne diseases" is drummed into the human psyche, which has led to commercial exploitation by bottling, branding and selling water at a profit. We are even paying a "Water Tax" and worse, water is being rationed in many places.

It may not be a far-fetched scenario if we are made to carry canisters of pure air like we do in the case of bottled water. The cure should, therefore, not be worse than the disease. We can put our heads together to come up with solutions for absorbing more wind energy into the grid. In doing so we must be vary of passing new laws. Deemed demand concept should be introduced to avoid grid dropping WEGs. Basic necessities like food, shelter and education are subject to tax. At least let the air and sunshine continue to be freely available to all mankind as intended by Creator God.

During the discussion, it was mentioned that the forecasting project in Tamil Nadu is now functional, therefore, the focus should be on scheduling wind energy in full. While Scheduling, the SLDC can absorb the quantity it desires and allocate the balance to the RLDC who would take appropriate action to see the wind energy is fully utilized.

The necessity of having large scale storage system was also discussed.

Meeting with TANGEDCO Officials at Chennai on October 14, 2015: The IWPA Chief Technical Advisor accompanied by the Secretary General met the CE (NCES) of TANGEDCO and other top officials and discussed inter-alia, the following:

a. To solve the problem of fixing of meters in the Tirunelveli Distribution Circle

b. Harmonic issues faced by Members

The CE(NCES) took immediate action and spoke to the Asst. Executive Engineer in charge of the Tirunelveli MRT (Meter Relay Test) and instructed him to extend full cooperation to the team fixing the meters. Meter fixing in progressing smoothly.

Our Chief Technical Advisor requested the CE(NCES) to convene a meeting to constitute a Committee comprising of officials of IWPA and TANGEDCO. The terms of reference of the Committee would be to prepare a white paper for scheduling excess Renewable Energy. Operationally and technically, handling of surplus wind power from Tamil Nadu during the

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high wind season is feasible as opined by the experts from SRPC and MNRE. We should now form a core Committee to discuss the various aspects and formulate a way out for scheduling wind power and to handle surplus wind power during the high wind season. CE (NCES) has assured that he would put up a note to their Chairman and get the approval for constituting the Committee.

The issue regarding Harmonics was discussed with CE Commercial and SE (R&D) of TANGEDCO. It was explained that while dealing with the Harmonics issue, the voltage harmonics should not be enforced on the customer as this is a grid related issue for which the customer is not responsible. They assured to look into the matter and revert to us.

Progress of Forecasting Project: NIWE has been giving Forecasting Data from end of August for use by SLDC. Last lap of meter fixing in Substations are in progress. The work is expected to be completed shortly.

Status of MUST RUN case: Your Association has filed a petition in APTEL for awarding "MUST RUN" status for Wind Energy. The case is likely to be heard on November 16, 2015. We will keep you posted of the developments.

Status of Refund of Unutilized Banked Units case: Your Association has obtained an interim stay order and interim injunction from the Madurai Bench of Madras High Court on October 05, 2015, restraining TANGEDCO from demanding refund of the amount of 25% of the unutilised banked units. Members may please report to the National Office if they are still facing issues with TANGEDCO.

Tamil Nadu will be having sources of firm power more than the current demand: High Wind Season in 2015 ended by 11th Oct 2015. A section of our Members who have invested in Tamil Nadu feel that the generation capacity of firm power added recently in Tamil Nadu will result in excess of the demand position and hence they are apprehensive that it would be an undesirable situation for wind energy. Let me assure you that having more than adequate thermal generating capacity is a good sign for next 7 months. We need not get alarmed by it. What we need is that during the high wind season, wind energy should be fully evacuated. The conventional plants should be taken up for maintenance or operated at technical minimum during Wind Season to accommodate wind energy.

IWPA submission to Karnataka ERC:

IWPA KSC has made submissions on the Draft "KERC (Procurement of Energy from Renewable Sources [Third Amendment] Regulations, 2015. The details of the submission is given on Page No. 31

IWPA submission regarding MERC's Open Access Regulation 2015: Our Maharashtra Council has submitted IWPA's suggestions regarding the Regulations 2015 on Open Access proposed to be issued by MERC. The details of the suggestions are given on Page No. 8

First Regional Interactive Wind Energy Workshop organized by CII at Vijayawada on October 08, 2015: With an objective of boosting investments in Wind Sector, CII is organizing a series of "Wind Energy Workshops" to create a platform for effective interaction between policy makers from Central and State Governments and the Wind Energy Developers. The First workshop was held at Vijayawada on October 08, 2015. The Secretary and the President of our Andhra Pradesh & Telangana Council had attended the programme.

IWPA representative at ICEF: IWPA had deputed Dr. R Venkatesh, National Council Member, to attend the "ICEF (Innovation for Cool Earth Forum) at Tokyo on October 07 – 8, 2015. A report sent by Dr. Venkatesh is given on Page No. 17

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. I am pleased to inform the members that I have been appointed as the Honorary Vice President of WWEA.

With best wishes and regards

Prof. Dr. Kasthurirangaian
Chairman

Prof. Dr. K Kasthurirangaian
Chairman

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October 07, 2015

To

The Chairman,
Parliamentary Committee on Energy on Camp at Chennai
IWPA Submission to the visiting Parliamentary Committee

Sub: Enabling better Power situation in Tamil Nadu

We are pleased that the Government of India under a dynamic leadership of Hon'ble Prime Minister Shri Narendra Modi is taking the Country ahead to achieve the highest ever generation capacity addition and highest ever increases in transmission lines in the country. We are also happy that the Government is promoting the Renewable Energy including Wind Energy in every possible manner. The Government of India has set an ambitious target of 60 GW of Wind Energy by 2022.

We the IWPA, the 1300 Members Strong Association of Wind Power investor, generators & consumers are spread in all 7 Windy States of India. It is our passion to propagate clean and Renewable Energy (RE) and look forward to the day when our country's entire needs are wholly met by clean, non-polluting, renewable energy. We are working with Government to achieve growth targets.

We understand that the Parliamentary Committee is visiting Tamil Nadu to review the achievement of growth target in TN. We the wind energy generators would like to take this opportunity to make the following submissions to the esteemed Committee which will enable the Government to achieve the target of 60 GW by 2022.

1. Inadequacy of Transmission Corridors to Tamil Nadu / Southern States from the rest of the country.

   With the completion of several Power Projects, cost of Power has come down in rest of the Country, while Power deficit & Price are still ruling high in Southern region & TN. Besides, several Conventional and Renewable Projects in Tamil Nadu and in the Southern States are

   Completed. As on date there is a big constraint in evacuation of power to & from Tamil Nadu to other States and as well as from Southern States to the rest of the country due to inadequate Transmission Corridors. It is understood that the Power Grid Corporation of India is constructing the transmission lines to ease out the constraint in power flow from / to Tamil Nadu and Southern States to / from the rest of the country. We request the esteemed Committee to take up the issue with appropriate authorities so as to expedite the Corridor availability.

2. Need for avoiding large wastage of wind energy in Tamil Nadu:

   Backing down of Wind Energy in Tamil Nadu is still continuing to the extent of around 40%. In terms of energy it constitutes 2,100 million units which works out to Rs. 1,540 crores per year at the prevailing tariff in Tamil Nadu. This is not only a avoidable loss to the wind energy generators but is also a national waste. The average cost of wind energy in Tamil Nadu is Rs.3.05 per unit. Unfortunately the TNEB rejects the low cost wind energy and buys costlier conventional thermal power. This increases the financial burden of TNEB and also increases the tariff rate to the electricity consumers

in Tamil Nadu. In this connection, the Appellate Tribunal of Electricity (APTEL) has given a clear direction to the Tamil Nadu Electricity Commission and TNEB to utilize the energy generated from wind farms fully by optimum scheduling of thermal stations. The APTEL has also directed that the thermal generators supplying under long / medium / short term power purchase agreement shall be asked to run at their minimum threshold limit during the wind season so as to accommodate the generation from wind energy generators. In spite of strict direction by the APTEL the wind generation is being backed down in Tamil Nadu which not only affects the growth of wind energy in Tamil Nadu but also increases the tariff of electricity consumers in Tamil Nadu. We request the esteemed Parliamentary Committee to take up the issues with the authorities in Tamil Nadu so as to save the wind energy generators in Tamil Nadu and also reduce the financial burden of TNEB. This is very important to achieve the ambitious target of 60 GW of the Government of India.

3. **Need for speedy installation of REMC**

It is understood that the Power Grid Corporation of India (Powergrid) is working on establishing the Renewable Energy Management Centre (REMC) in all Renewable Energy rich states as well as in Regional Load Despatch Centres. Establishment of such centres will provide enabling environment to absorb more of variable wind energy and integrate into the grid.

Considering the large backing down of wind energy in Tamil Nadu, we request the esteemed Committee to take up the issue with the concerned authority to establish the REMC in Tamil Nadu at the earliest.

4. **Need for Spinning Reserves and Energy Storage**

To integrate the variable wind energy into the grid TNEB should have adequate spinning reserves. There is inadequate Spinning Reserves in Tamil Nadu and it is one of the reasons for not fully absorbing the wind power in Tamil Nadu. We request the esteemed Committee to advise the concerned authorities in Tamil Nadu to create adequate Spinning Reserves in Tamil Nadu, besides ramping down / up of thermal generator to absorb more of Wind Energy.

5. **Renewable Purchase Obligation (RPO) to be made compulsory:** The Discoms and captive consumers have been directed to purchase a pre-determined percentage of the energy mix from RE sources but not enforced on them. The RPO implementation has not been closely monitored. Unsold REC have failed to accelerate the growth of the RE Sources. RPO's to be enforced.

6. **Ensuring Must Run status for Wind Energy Generators:** The Central Electricity Regulatory Commission has stipulated a provision 5.2 (u) under its Indian Electricity Grid Code, Regulations 2010 which states that wind generators should be treated as "must run" plants. However, in practice this is not being followed. Grid manager as in Tamil Nadu are not providing "must run" status and are backing down Wind Energy. If adjustments have to be made, then, the ramping up or down should be out of the conventional energy sources and hydel and gas. (Due to back down in 2013-14, TN WEGs lost revenue for 2.1 billion units)

7. **Ensure timely payments by Discoms:** Delay in payment has a direct impact on the viability of the wind industry & build confidence in future investors.

8. **Waiver of Inter-state transmission charge for WEGs like that for Solar:** Wind energy being seasonal and variable will be optimally used only when it is transferable inter-State. In order to ensure the viability of the inter-state transferability of wind energy, the Inter-State charges need to be waived as for Solar. Ideally all RE Sources to be injected into a National Grid which would facilitate better absorption and utilization of RE.

9. **Enlarging the scope of National Clean Energy Fund (NCEF).Flexible terms regarding quantum of finance through IREDA:** Long-term finance at reasonable and flexible rates should be evolved for wind energy generators using NCEF funds.

10. **Not to insist on competitive bidding for determining the tariff for any RE Source:** For effective competitive bidding to take place there should be numerous buyers and sellers in the market. In the instant case there is only one buyer. RE Sources being clean, non-polluting and having no carbon footprint whatsoever needs to be encouraged even if entails payment for the RE Source at a relatively initial higher cost.

Looking forward for your early help in the above direction.

Thanking you,

With Best Wishes & Regards,
For Indian Wind Power Association

Prof. Dr. K. Kasthurirangaian
Chairman

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IWPA MSC Submission on Draft MERC (Distribution Open Access) Regulations, 2015

October 07, 2015

The Hon'ble Secretary
Maharashtra Electricity Regulatory Commission
13th floor, Centre No.1, World Trade Centre,
Cuffe Parade, Colaba, Mumbai – 400 005

Dear Sirs,

Sub: Suggestions, Comments and Objections to Draft MERC (Distribution Open Access) Regulations, 2015

At the outset we welcome the Draft MERC (DOA) Regulations, 2015 issued on 16.09.2015 as it has substantially restored the critical parameters with respect to non firm power like wind power to the earlier MERC (DOA) Regulations 2005

Our few suggestions / comments are as follows :

1. Regulation 2.1(4) – Banking

"Banking" means the surplus Renewable Energy generation credited with the Distribution Licensee after set off with consumption in the same Time of Day slot as specified in Regulation 24;

IWPA MSC Comments

"Banking" has been recognized as vital in the operation of renewable energy generation especially non firm power like wind power. The requirement of Banking has been recognized by policies of Government of Maharashtra, orders of the Hon'ble Commission and Hon'ble APTEL. However, the same has been a bone of contention in plethora of litigation between the Distribution Licensees and wind power generators. Since the words referred in capitalized manner has legal significance and has been argued before Hon'ble Commission in number of petitions that if words not used in capitalized manner and not defined should be adduced a common meaning. In the definition of Banking as Renewable Energy has been referred to in a capitalized manner, a clear definition thereto is requested to be incorporated in the Regulation

Suggestion

To include definition of "Renewable Energy"

2. Regulation 2.1(6) – Billing Demand

2.1) *"Billing Demand" in respect of partial open access consumer, will be higher of the following*

.....

IWPA MSC Comments

As words not mentioned in a capitalized manner in number of litigations before the Hon'ble Commission had been argued that such words carry common meaning. Hence to avoid any such adverse interpretation especially by Distribution Licensees, it is suggested that the words "partial open access consumer" in the definition of Billing Demand is used in a capitalized manner "Partial Open Access Consumer".

Suggestion

"Billing Demand" in respect of Partial Open Access Consumer, will be higher of the following

.....

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National Council: *Chennai;* **Regional Council:** *New Delhi;* **State Councils:** *Ahmedabad, Bengaluru, Hyderabad, Jaipur, Mumbai*

2.2) *"Billing Demand" in respect of partial open access consumer, will be higher of the following*

1. Actual maximum demand recorded in the month during 0600 hours to 2200 hours;
2. Contract demand as opted by the consumer.

IWPA MSC Comments

Partial open access consumer is defined in Regulation 2.1(29) to mean an open access consumer who maintains partial demand with the Distribution Licensee in whose area of supply he is located to cater to his load requirements. Thus with respect to partial open access consumer a part of the demand of the consumer is being met by his availing the power from generator or generators other than the Distribution Licensee.

As far as open access from renewable energy sources especially from non firm power like wind, the consumer would avail only part of his requirement and would stand categorized as partial open access consumer only. Further considering the non firm nature of wind power, a consumer dare not reduce his contract demand. In view of this factual position, the demand charges to be paid by such consumer would be of a high order.

Further there cannot be a discrimination between a consumer not availing open access and obtaining all the required power from a Distribution Licensee and a consumer availing open access for part of his requirement especially from non firm power like wind. The Hon'ble Commission in their tariff order dated June 26, 2015 for consumers has defined billing demand as follows

The Billing Demand definition in case of HT categories has been retained at the existing levels, i.e., Monthly Billing Demand will be the higher of the following:

(a) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;

(b) 75% of the highest Billing Demand/Contract Demand, whichever is lower, recorded during the preceding eleven months;

(c) 50% of the Contract Demand.

Suggestion

Hence we suggest the "Billing Demand" definition be maintained in DOA, 2015 identical to what is applicable to HT consumers under the Tariff Order. Therefore the definition be modified as follows :

"Billing Demand" in respect of partial open access consumer, will be higher of the following

(a) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;

(b) 75% of the highest Billing Demand/Contract Demand, whichever is lower, recorded during the preceding eleven months;

(c) 50% of the Contract Demand.

3. Regulation 2.1(35) – Supply Agreement

3.1) ***"Supply Agreement"*** *means an agreement between one or more Consumers, Generating Stations or Licensees, as the case may be, for supply of electricity through Open Access*

IWPA MSC Comments

Supply Agreement is defined to include agreement between consumer and generating station too. As such an agreement is a bilateral agreement between two parties and is permitted to be entered into as per section 49 of the Electricity Act, 2003 and the same is not withstanding the provisions of Section 62(1)(d) wherein the power to determine the tariff rests with the appropriate commission. Therefore when the Act provides that even an appropriate commission is not involved in laying down tariff and other conditions in respect of a bilateral supply agreement between the consumer and the generator, insisting on such an agreement to be furnished as part of application for open access may not be appropriate and would be not in consonance with the provisions of EA, 2003.

Suggestion

Therefore it is suggested that reference to an agreement between consumer and the generator in the definition of supply agreement be deleted and definition modified as follows :

"Supply Agreement" means an agreement between one or more Consumers ***with Licensee(s) or*** Generating Stations ***with*** Licensee(s), as the case may be, for supply of electricity through Open Access.

Once Definition of Supply Agreement is modified, it would automatically take care of reference thereto in Regulation 8.3 and 8.8.

3.2) ***Clause 1(v) of Part A*** *– General under Connection Agreement in Annexure II of the Draft MERC (DOA) Regulations 2015 expressly defines*

Supply Agreement means the agreement contemplated under Section 49 of the Act;

Suggestion

For the reasons detailed against serial no.1.1 above, the reference to agreement u/s. 49 of EA, 2003 to be deleted and may repeat the modified definition of Supply Agreement suggested above in the Connection Agreement too.

4. Regulation 4.4 – Meter Reading

The Regulation reproduced below :

The final meter reading of the Consumer shall be taken by the Distribution Licensee on the date from of commencement of Open Access becomes effective:

Provided that the final meter reading shall be taken in the presence of the Consumer or his representative, and the Generating Company or Licensee from whom the Consumer intends to obtain supply of electricity, after written intimation to them:

Provided that, if any of these entities are not present as scheduled, the Distribution Licensee may take the final reading and inform them accordingly.

IWPA MSC Comments

As per the Regulation Open Access application ought to be submitted at least 3 months prior to the requested commencement period of open access as per Regulation 10.3. Further final meter reading as per Regulation 4.4 is stated to be on the date from of commencement of Open Access becomes effective.

Since the Generator or a consumer seeks open access from a specific date provided it has applied 3 months in advance as per Regulation 10.3, open access is required to be granted from the said specific date.

Hence it is not clear whether any other date is contemplated in Regulation 4.4 when it is stated that final meter reading shall be on the date from commencement of open access becoming effective.

Suggestion

Hence it is requested to define the effective date of commencement of open access in the Regulations itself.

IWPA MSC Comments

Further if the Distribution Licensee delays in granting of open access as has been the reality in the past many years, the generator and the consumer would suffer.

Suggestion

Hence it is requested specific timelines could be provided in processing of the application and the consequences that would follow for non adherence of the timelines.

5. Regulation 11.10 and 11.11 – Non Utilization of Short Term Open Access

11.10. If the Consumer, Generating Company or Licensee, as the case may be, is unable to utilize for more than four hours the full or a substantial part of its allocated capacity, it shall inform the MSLDC along with reasons therefor, and may surrender the use of such capacity but shall pay transmission and Wheeling Charges applicable to the original reserved capacity and period.

11.11. The MSLDC may cancel or reduce the capacity allocated, to the extent that it is under-utilised and after giving notice to the affected parties, when such capacity is under-utilised for more than three days or the Consumer, Generating Company or Licensee, as the case may be, fails to inform the Distribution Licensee of its inability to utilise the allocated capacity.

IWPA MSC Comments

The Regulation 11.10 states that in the event the consumer, the generating company or the licensee or as the case may be is unable to utilize for more than four hours the full or substantial part of its allocated capacity, it has to inform MSLDC and also to surrender the use of such capacity. Further it is also stated in Regulation 11.11 that MSLDC may cancel or reduce the capacity allocated.

The time frame stipulated of four hours is too short a period for a short term open access availed for a one month duration. The non utilization could be due to genuine issues like production stoppage, holidays declared, sudden breakdown of equipment / machinery, labour issues to name a few.

Further such unexpected stoppages cannot be envisaged in advance when short term open access is applied for between four months prior to availment of short term open access and latest being 10th day of the preceding month of availment of short term open access. Hence the period stipulated to be appropriately increased to a reasonable time frame.

Suggestion

11.10. If the Consumer, Generating Company or Licensee, as the case may be, is unable to utilize for more than forty eight hours the full or a substantial part of its allocated capacity, it shall inform the MSLDC along with reasons

therefore, and may surrender the use of such capacity but shall pay transmission and Wheeling Charges applicable to the original reserved capacity and period.

6. Regulation 15 – Wheeling Charges

Regulation 15.3 states

"An Applicant availing Open Access shall be liable to pay an additional charge at the rate of twenty five percent of the Wheeling Charges for the use of a distribution system which is in excess of its allotted capacity"

IWPA MSC Comments

The proviso to Regulation 15.1 is unambiguous in its statement that wheeling charges shall be payable on the basis of actual energy flow at the consumption end. However, Regulation 15.3 contemplates additional levy of 25% of the normal wheeling charges for the use of the Distribution system in case such power wheeled is in excess of the allotted capacity.

In other Regulations of Billing Demand it is natural that in the event of Billing Demand exceeding the contract demand or allotted capacity, penal demand charges is attracted. Hence stipulation of levy of additional 25% over and the above the normal wheeling charges would be double whammy and the consumer has to suffer twice for a single act of having drawn power in excess of the allotted capacity.

Suggestion

In view of the above, it is suggested that Regulation 15.3 be deleted.

7. Regulation 21.1 – Metering and Communication

7.1) *21.1 Special Energy Meters ('SEM's) with automated meter reading ('AMR') facilities with at least two communication ports shall be installed by the Distribution Licensee in the case of an Open Access Consumers and Generating Station, irrespective of its capacity, at the cost of such Consumers or Generating Company, as the case may be:*

Provided that the Open Access Consumer shall establish and operate a suitable communication channel for exchange of meter data at all times during the period of Open Access.

21.2. Any Consumer (including one who has not sought Open Access) desiring such a SEM so as to be in readiness to procure power through Open Access in future may request the Distribution Licensee to install it for and at the cost of such Consumer.

IWPA MSC Comments

The requirement of SEM has been a stipulation from MERC DOA, 2005 itself. However, from experience it takes 3 to 5 months for procurement and installation of SEM starting from initial approval by Distribution Licensee and final checking and commissioning of the SEM. Those consumers who are already availing open access under earlier DOA Regulations 2005 and 2014 may have installed the SEMs. However new consumers may opt for procurement and installation of SEM once open access is granted. It is possible that an open access application is rejected on technical grounds. Hence the consumer can be sure that it could avail open access only after its application for open access is sanctioned. Therefore the consumer need to have SEM only after his open access application has been sanctioned by the Distribution Licensee as otherwise it would be an additional avoidable expenditure for the consumer.

Suggestion

In view of the above and further since for the present scheduling is not a must as per Regulation 20.3 of the Draft DOA Regulations 2015 for non firm power like wind power, the installation of SEM could be a condition for issuance of credit notes but not a pre-condition for grant of open access i.e. it is suggested that the Regulation be appropriately modified to state as follows

"In respect of non firm power under the Commission's Regulations installation of SEM with Automated Meter Reading (AMR) facilities with communication ports is a must for issuance of credit notes but open access be granted for the period for which the same has been applied for subject to compliance with other regulations in anticipation of the installation of SEM with Automated Meter Reading".

7.2) Further comments and suggestions on the above is given below.

IWPA MSC Comments

The requirement of SEM was a must under earlier Distribution Open Access Regulations, 2005 and the need was reiterated by the Hon'ble Commission in their order dated January 3, 2013 in Case No.8, 18, 20 and 32 of 2012. Further one of the Distribution Licensees i.e. MSEDCL had categorically stated the requirement of SEM in their commercial circular 194 of April 9, 2003. Accordingly most wind power generators as well as their consumers have installed the SEMs as per the extant specifications of Distribution Licensee which in the case of wind power is predominantly MSEDCL. In fact such installations were carried out when the requirement of SEM was being mandatorily implemented in the

last one to two years and therefore the generators and consumers have expended substantially on such installations.

In view of the above now stipulating SEM with automated meter reading (AMR) facilities with at least two communication ports, though to be installed by the Distribution Licensee in the case of open access consumers and generating stations, the same is stipulated to be at the cost of the consumers or generating company. This being now a new requirement would entail additional cost on consumers and wind power generators. Since wind power is a non firm power and its generation is recognized to be of utmost importance to combat climate change issues, imposing such additional cost on the non firm power generators / consumers would not be justified.

Further one is aware the wind power plants are predominantly located in hilly and remote areas where wireless and cable communication systems are not available and wherever available its continuous operation is susceptible.

Suggestion

In view of the above, the existing metering arrangements of SEMs installed be permitted to be continued and the new requirement of AMR be not made mandatory for non firm power generators and consumers. Hence a Second Proviso to Para 21.1 be added as follows :

Provided further a non firm power open access generator and their consumer shall be exempted from installation of SEMs with AMR facilities.

7.3) Special Energy Meters (SEM)

It is found that no definition of SEM is provided in the MERC Draft DOA, 2015 Regulations. Hitherto SEM was defined both in the earlier regulations of 2005 and 2014.

In fact the 2014 Regulations defined

"Special Energy Meters to mean meters installed in accordance with Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 specified by Central Electricity Authority and amended from time to time".

Suggestion

It is suggested that to avoid any ambiguity on the type of the meter, SEM may be defined appropriately connecting the same with CEA Regulation, may be as in 2014 Regulations so that clarity exist on the type of meter expected to be installed.

7.4) Regulation 21.6 states

The Distribution Licensee shall test and install such SEM within sixty days from a request from the Consumer, Generating Station or Licensee, as the case may be.

IWPA MSC Comments

The Regulation 21.1 expressly state that SEMs to be procured only from Distribution Licensee and the earlier Regulation an option was available to the generator and consumer to procure such SEMs which are approved by the Distribution Licensee directly from the supplier. The stipulation that SEMs be procured only from Distribution Licensee is

not an issue. However, despite the provision in Regulation 21.6 that the Distribution Licensee shall test and install SEM within 60 days from the request, if the said deadline is not adhered to by the Distribution Licensee, consequences thereof has not been stipulated. Hence it is suggested as follows :

Suggestion

In the event Distribution Licensee do not adhere to the timelines for testing and installation of SEMs requested for by the open access consumer, generator as per Regulation 21.6, then the Distribution Licensee shall grant credit for renewable energy from the date from which open access have been requested for irrespective of the existence of SEMs or not.

The above would facilitate salvaging the non firm power the generation on which the generator has no control and when the generation is feasible, one has to generate the power to the maximum extent as in the case of non firm power once the same is lost it is lost forever.

8. Regulation 24 – Banking of Renewable Energy Generation

8.1) Regulation 24.4 states as follows :

Banking of energy shall be permitted during all twelve months of the year:

Provided that the credit for banked energy shall not be permitted during the months of October, November and March, and the credit for energy banked in other months shall be as per the energy injected in respective TOD slots determined by the Commission in the relevant Orders determining the Tariffs of the Distribution Licensees;

Provided further that the energy banked during peak TOD slots may also be drawn during off-peak TOD slots, but the

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energy banked during off-peak TOD slots may not be drawn during peak TOD slots.

IWPA MSC Comments

Regulation 24.2, 24.3 permit banking of surplus energy from non firm renewable energy generating station throughout the financial year from April to March. However, the First Proviso to Regulation 24.4 negates credit for banked energy during months of October, November and March.

The logic for the denial of credit for banked energy for three specific months is not clear. This means for three specific months as above the renewable energy generator will not realize any revenue from its consumer for supply of power made in the earlier months but banked or during these specific months. Consequently because of such restriction there could be banked energy in excess of the consumption of the consumer during the 12 month period and treatment of such banked energy would be governed by Regulation 24.6 for which comments are separately given below.

Since non discriminatory open access is called for to be granted as per section 2(47) read with section 42(2) of the EA, 2003 subject to such conditions as may be specified by the State Commission within one year of the appointed date by it, the EA, 2003 warrants that any conditions of restrictions may be specified in the beginning itself when Open access has been introduced in the state.

As far as the state of Maharashtra is concerned, open access has been introduced in 2004 itself and further the DOA Regulations 2005 had a successful run for long nine years and did not contain such negation of credit for banked energy in specific months as is found in the Draft DOA Regulation 2015.

Such adjustments would result in accumulation of banked energy if the consumer is not able to consume 12 months generation in nine month period and the same should stand carried forward to the subsequent years

Suggestion

Therefore it is suggested that such restriction or negation for giving credit for banked energy for three months of October, November and March be deleted / appropriately modified.

Alternatively, it is suggested that the credit for banked energy for three months being not given be compensated by permitting such credits from April to June of the following financial year.

8.2) Further observation

IWPA MSC Comments

Also the experience of the members is that many a times the Distribution Licensee does not give credit for wind power generated in a month in the bill of the consumer for the same month or even at times in the subsequent months and credits are not given in an orderly manner. Since the meter readings are more or less taken around the same time especially for the purpose of REC, meter reading ought to be taken at the end of the month or the first day of the next month, it is suggested that the Hon'ble Commission may incorporate a Regulation directing Distribution Licensee as follows:

Suggestion

The credit for renewable energy generated by the Generator under open access to be given in the bills of the consumer preferably in the same month and for any reasons if the same cannot be given in the immediately succeeding month.

8.3) Regulation 24.6 states as follows :

The un-utilized banked energy at the end of the financial year shall be considered as deemed purchase by the Distribution Licensee at its Pooled Cost of Power Purchase for that year:

Provided that such deemed purchase may be counted towards the Renewable Purchase Obligation of the Distribution Licensee, at its option, in which case the Generating Station would not be entitled to Renewable Energy Certificates to that extent.

IWPA MSC Comments

Though the unutilized banked energy at the end of the financial year is proposed to be considered as deemed purchase by the Distribution Licensee at its pooled cost of power purchase for that year, the proviso provides that such purchase shall be made only if the deemed purchase at pooled cost of power purchase is permitted for counting in the renewable purchase obligation. As the extant Regulations on renewable purchase obligations of both CERC and MERC do not permit the purchase of power at pooled cost of power purchase to be counted for renewable purchase obligations, unless REC Regulations is amended by CERC permitting purchase of RE under APPC price to qualify for RPO obligation of the Utility the implementation of aforesaid regulation 24.6 may not be possible. Consequently the non firm generators are bound to lose their power and the same would be in fact a deemed free power to the Distribution Licensee which is never intended.

Suggestion

Therefore the proviso to Regulation 24.6 is requested to be deleted.

8.4) Further observations

IWPA MSC Comments

Further even in the proviso it is stated that such purchase of renewable power at pooled cost of power purchase to be counted in renewable purchase obligation of the Distribution Licensee shall be at its option and in which case the generating station would not be entitled to renewable energy certificates to that extent.

It is suggested that even if tomorrow such purchase of non firm power at pooled cost of power purchase is permitted to be counted for renewable purchase obligation, option ought not to be given to the Distribution Licensee as otherwise such banked power would be lost forever if such option is not exercised.

Further the combined effect of regulation 24.4 and 24.6 would result in higher amount of unutilized banked renewable energy since regulation 24.4 negates credit for banked energy for three specific months and regulation 24.6 provides option for purchase of such banked power only if the same is counted for renewable purchase obligation.

Suggestion

Therefore it is suggested that since the intention is to encourage renewable energy sources and not to deprive them of the invaluable renewable energy power generated and indirectly resulting in the Distribution Licensee availing the free power the proviso to regulation 24.6 is requested to be deleted.

9. Regulation 29 – Payment Security Mechanism

The Applicant for Long-term or Medium-term Open Access shall open an irrevocable Letter of Credit in favour of the Nodal Agency to the extent of the estimated amount of the various charges payable for a period of two months.

IWPA MSC Comments

The stipulation of Letter of Credit favouring Distribution Licensee which is defined in Regulation 3.4 to the Distribution Licensee itself would result in additional cost to the generators or consumers as the case may be. The letter of credit required to be given is for an estimated amount of various charges payable for a period of two months.

Obviously one must estimate the charges likely to be paid to the Distribution Licensee and to that extent open letter of credit. In respect of non firm power like wind power such estimate may be difficult. In fact this has been recognized in the Regulation itself by exempting non firm power from scheduling. Further since wind power is seasonal such charges payable may vary considerably between high wind season and low wind season.

More importantly the present system of Distribution Licensee collecting the various charges of open access in advance before issuance of credit note itself act as a payment security mechanism and the said system has been accepted by the consumers and the generators and the said system in vogue is functioning smoothly. Therefore the said Regulation is requested to be deleted as far as non firm power is concerned.

Suggestion

The Applicant for Long-term or Medium-term Open Access, other than the open access availed for non firm power shall open an irrevocable Letter of Credit in favour of the Nodal Agency to the extent of the estimated amount of the various charges payable for a period of two months.

New Proposal – Percentage wise allocation of generation from turbines

IWPA MSC Comments

The Distribution Licensees were permitting percentage wise allocation of generation from wind power generators to multiple consumers. As an illustration if a wind power generating plant of 5 MW having single meter connecting all the wind mills aggregating to 5 MW, the generators were permitted to seek open distribution open access to supply power on percentage basis i.e. say 60% to consumer "A" and 40% to consumer "B". Since one of the main objectives of Electricity Act is to encourage open access and providing the option to the consumer and the generator to choose their supplier and consumer as the case may be and for the same the Distribution Licensees to extend non discriminatory open access. Since as in the illustration a 5 MW wind farm is having single meter, the generator would face the dilemma of he being restricted to supply power only to a very large HT consumer who can consume their entire power. Alternatively the generator has to incur substantial expenditure in having separate meters for each of the wind mills. Another change in the situation is that nowadays the capacity of the single wind mill is on the rise and the current capacity ranges 2 MW +. Therefore percentage wise allocation of generation from wind turbines is a necessity

Suggestion

To include in the Regulations a provision for availing open access by allocating a percentage of the generation from generating units to multiple consumers

General Suggestion

Further, it is our humble suggestion that the timelines as well as consequences for all non-compliances of distribution licensees be provided in the regulations, as it can be seen from the past that the maximum litigations and disputes before this Hon'ble Commission are due to non-adherence by distribution licensees to undertake its obligations in a timely manner including but not limited to issuance of open access applications, issuance of credit notes, etc.

We trust the Hon'ble Commission would consider our above suggestions in the final Distribution Open Access Regulations, 2015 that would be notified. We further request that the new Distribution Open Access Regulations be kindly notified on a priority so that requisite impetus for generators and consumers especially in the non firm power sector to avail open access is restored in line with the provisions of EA, 2003.

Thanking you.

Yours faithfully
For Indian Wind Power Association

(S Parvathinathan)
Coordinator IWPA - MSC

Participation of IWPA in 2nd Annual Meeting of Innovation for Cool Earth Forum (ICEF), Tokyo, Japan

Innovation for Cool Earth Forum (ICEF) was hosted by the Ministry of Economy, Trade and Industry (METI) and the New Energy and Industrial Technology Development Organization (NEDO) and co-hosted by Ministry of Foreign Affairs (MOFA) and Ministry of Environment (MOE) of Japan.

The 2nd annual meeting of ICEF held this year in Tokyo on 7th and 8th October was characterized by three plenary sessions and eighteen concurrent sessions covering diverse topics such as principal issues in future GHG reduction, future strategy for climate change, geothermal power, Hydrogen energy, nuclear energy, cement, iron and steel, energy systems, wind power, artificial photosynthesis, electricity storage, smart grids, zero energy buildings, low-carbon mobility, solar energy, advanced liquid biofuels, carbon capture etc. the two day event was attended by more than 1000 participants from over 70 countries.

Dr. Venkatesh Raghavan, Member, National Council of Indian Wind Power Association delivered an invited talk on "Challenges and Opportunities in large scale integration of wind energy into grid in emerging countries – An overview of wind power development in India with specific reference to handling wind variability and power fluctuations".

The talk covered some salient aspects such as evolution of Indian grid and grid codes, development of wind power in India and vision 2022, current issues with wind power integration and challenges and opportunities in large scale wind integration. The opportunities covered briefly aspects such as wind forecasting, load forecasting, hybrid energy systems, energy storage, integration with smart grids and smart cities, use of electric mobility as storage, demand response, development of flexible loads, green corridors and REMC's for RE evacuation, etc.

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Prof. Dr. K Kasthurirangaian
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October 20, 2015

Shri Upendra Tripathy IAS
Secretary, Ministry of New & Renewable Energy
Room No. 102; Block No. 14
CGO Complex, Lodhi Road, New Delhi -110 003

Kind Attention: Ms.Varsha Joshi, JS, MNRE

Sub: 1. Deviation Settlement Mechanism (DSM) – Request for Changes to enable ease in doing business.
2. Wind & Solar Energy to be declared as National Asset. Deemed Generation benefit for Grid dropping.
3. Socialization of State level DSM Penalties.

Dear Sir / Madam,

Preamble:

Fixing Revised Deviation limits for Settlement Mechanism (DSM):- As decided at the meet on 2.9.2015, the empowered committee of Joint Secretaries of MOP, MNRE, CERC & POSOCO decide on the revised draft of DSM to be placed before CERC. We the Stakeholders are aware that CERC would be calling for Public hearing in Wind rich States in cities like Chennai, Ahmedabad, Jaipur & Bhopal and also put on CERC websites calling for comments from Stakeholders for at least 30 days before final decision is announced by CERC. We have the following submissions to the committee.

1. Deviation limits to be increased for Wind Rich States:

While India was predominantly having electricity from fossil fuels inputs, control level of generation was much in the hands of generators and fixing of limit of Scheduled variation at 150 MW was not unreasonable.

When India moves to RE generation era, the 7 Wind rich States generate Wind Energy where the Input Wind Energy penetration levels touch 30%. Wind being nature dependent is beyond the control of generator. When we encounter drops like 1000 MW in one hour's time we have the present limit of 150 MW which is inadequate. Under existing DSM the SLDCs of Wind rich States pay huge penalties for harvesting more of Wind Energy. To avoid such penalties, SLDCs of Wind rich States Curtail / Grid drop Wind Mills and Wind generators do not get any deemed generation benefits. You had seen to hue & cry of SLDCs and Wind generators at the MNRE meeting of Stakeholders on 2nd Sep 2015 at New Delhi.

There was a demand from Wind rich States for a permissible limit of variation of Schedule to be upped from 150 MW to 15% of the maximum injection of RE by any State into the grid.

For Example: For a State like Tamil Nadu which has 4200 MW as maximum Wind penetration, the permissible limit of variation to be fixed for Tamil Nadu is to be at 4200 x 15% = 630 MW. This shall be the ease of doing business for Wind Energy generators or Tamil Nadu SLDC.

2. **Fixing limits for Forecasting / Scheduling deviations:** It was ± 30% for the permissible levels of Forecasting earlier which has come down to ± 12% in the latest announcement by CERC. We Stakeholders believe that fixing such limits as 30% or 12% is on arbitrary basis. You are aware that Forecasting errors can be minimal when the geographical area covered is large by number of Wind turbines and the combined MW capacity is larger, the error is minimal. So also the cost of Forecasting is also minimal when large number of Wind generators join together.

   Such an effort is being tried at Tamil Nadu. You have heard the Director – Generation from Tamil Nadu informed the gathering chaired by Minister for MNRE & MOP that the accuracy level of Forecasting is as good as 85% for high Wind time. The Country could learn from the experience of Tamil Nadu, what can be realistic variation level of ± that can be adopted for the Country.

   While the permissible limits of variation of Forecasting is fixed as a % of Scheduling for the high Wind time which is from 15th April to 15th October. During low Wind time from October to April when the Wind energy penetration levels are much less than 150 MW or the minimum limits fixed for Wind rich States, **any variation in Scheduling less than 150 MW** or minimum permissible MW fixed for the State **can be ignored as not liable for being penalized.**

3. **Wind & Solar to be declared as National Assets:** Wind & Solar energy are to be declared as National Assets and evacuation of energy from RE sources made mandatory with deemed generation benefit. With the introduction of deemed generation benefit, grid dropping Wind Mills will become considerably low because investments into WEG is based on getting back returns on all hours Winds blow. **Justice demands that if SLDC opts to grid drop & there by cause drop in returns, it will have to compensate like it compensates fixed cost of thermal units when they are grid dropped.**

4. **State level Forecasting Vs. Wind Farm level Forecasting:** The Country has seen that State level Forecasting for as great number like 11,800 Wind Mills or 7480 MW is possible in Tamil Nadu. Other States could also adopt such great aggregation at State level for similar good results.

   We IWPA propose to take through our State offices such State level aggregation in Rajasthan, Madhya Pradesh & Andhra Pradesh in the Current Financial Year. DSM should encourage such State level Forecasting.

   Any penalties for deviation in Forecasting or Scheduling or the **balancing cost of Wind Power variability may please be socialized** among all consumers in State as an effort of Promotion of RE generation in the State **as the variability depends on nature.** As far as possible DSM to discourage private Forecasting at Wind Farm level to avoid exploitation of the small Wind investors / generators.

   Looking for your positive help.

   Thanking you in anticipation.

With best wishes and regards,
For Indian Wind Power Association,

Prof. Dr. K. Kasthurirangaian
Chairman

Copy to Dr.S. Gomathinayagam,
Director General, NIWE, Chennai

Congratulations to

Prof. K. Kasthoorirangaian, Chairman, IWPA
on his appointment as Honorary Vice President
of the **World Wind Energy Association** at the
WWEA General Assembly held at Jerusalem,
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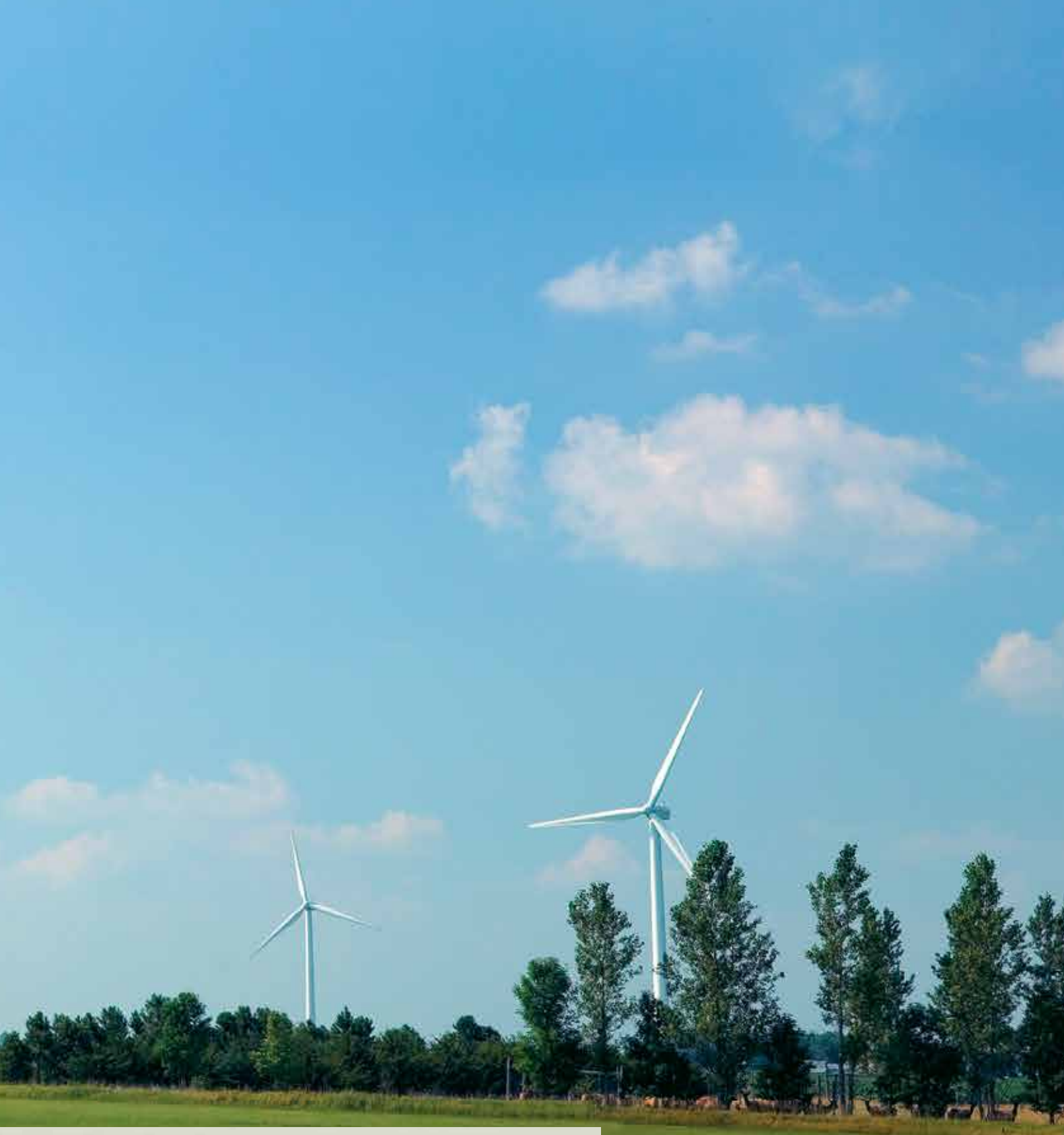

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IWPA AP&TSC's Submission to APTRANSCO

October 21, 2015

Ref: No. IWPA/AP/APTRANSCO/2015-16/2110

To

The Chairman & Managing Director
APTRANSCO, Vidyut Soudha, Khairatabad,
HYDERABAD - 500 082.

Dear Sir

Sub : **Request for waiver of the supervision and approval process for the constructing the EHV line and the Pooling substation being developed by wind power project developers in the State of Andhra Pradesh**

Ref:
1. The review meeting held on 7.10.2015 along with MNRE at the Park Hotel Hyderabad.
2. The review meeting conducted by the Secretary Energy and your good self to monitor the progress of Wind Power Project Capacity addition at Vijayawada on 8.10.2015

We wish to thank you for the kind coutersy extended to our members and the keenness you have shown to resolve the issues affecting the progress of capacity addition in the wind sector.

The Government of Andhra Pradesh has been in the forefront of encouraging the development of Renewable energy projects and in the process has come out with one of the country's best Wind Power Policy attracting interest of large scale investors into the State.

The ambitious target of achieving the 4000 MW over the next few years can be turned into a reality with little changes to the existing approval process and procedures in vogue.

Sir, we wish to have your attention to the concerns expressed by all the members of our association, where in it has been brought to your notice that there is an inordinate delay in according permissions for the EHV Evacuation Infrastructure including the Pooling Substation (PSS) being owned and constructed by the developers of the project themselves.

1. Payment of Supervision Charges / Scheme Approval / SLD & Layout Drawing Approval and Work Commencement at Site.

To commence the Evacuation Work at Site upon receipt of evacuation approval accorded by APTRANSCO, the process listed below is being followed:

- Developer submits Consent to take up the work on a turnkey basis and Undertaking to abide by all the conditions which are a part of the approval accorded.
- Developer Submits a BG as a security for the evacuation accorded
- APTRANSCO gets verification from Bank on a case to case basis
- On completion of all these then the developer enters into an MOU
- The Corporate office(CO) at Hyderabad calls for Estimates from APTRANSCO Field Officers
- On receipt of the estimates from the field officers APTRANSCO - CO issues Demand Note for payment of Supervision Charges after Full Board Approval.

- Developer pays the Supervision Charges.
- On payment of the Supervision charges, APTRANSCO communicates Scheme Approval and in turn Developer Submits SLD & Layout Drawings
- APTRANSCO accords approval of SLD & Layout Drawings to commence the work at Site

At present, the time taken for the above process is in the range of 90 – 120 days and it's very unfortunate that even after the receipt of the evacuation approval which itself is a long drawn process the developer is unable to start the construction.

In order to reduce the timelines required to start the construction by the developers, we request your good offices to modify the above process by incorporating the following changes which would help the developers to start the construction immediately on receipt of an evacuation approval and the suggestions we propose below are practical and practicable resulting in a WIN – WIN situation for both the developers and APTRANSCO.

- APTRANSCO based on the size of the pooling substation and the estimated length of the evacuation line can fix ADHOC Supervision charges which can be paid along with the evacuation approval itself.
- The Actual supervision charges can be communicated to the developer during the course of the work execution and based on the final reconciliation, any shortfall in the supervision charges can be collected from the developers by issuing a demand note and any excess charges paid by the developer can also be refunded back to the developers by devising an appropriate procedure acceptable to APTRANSCO and the developers.
- Lay down Specifications/ Standard Model SLDs and Layouts for each voltage level of Pooling Sub Stations to be built by the Developers & Terminal Bays of APTRANSCO Sub Stations including the EHV line..
- The Developer shall be allowed to proceed with execution of the construction activity at the site upon remittance of Supervision Charges and submission of Consent/Undertaking as per the Evacuation Approval.
- The present MOU process needs to be separated from the above process to avoid delay in commencement of construction and considering the above; the revised MOU process needs to be formulated by APTRANSCO.

Sir, if the above requested process is put in place the developers can commence the construction of the Evacuation infrastructure **within 15 days from the date of receipt of Evacuation Approval.**

It has also been brought to your kind notice during the reviews held with the developers that the supervision charges being collected include:

- Engineering Charges
- O&M Charges
- Charges for the Spares Etc.

Sir, the fact is that all the investment to construct the EHV network and the PSS are being borne by the developer and hence these charges being levied on the developers are only an additional financial burden on the project developers and hence needs to be waived off.

2. System safety, Equipment Drawing Approvals and Inspections

During both the meetings referred above we understand that APTRANSCO is concerned about the system safety as our evacuation infrastructure will ultimately get integrated with APTRANSCO system and may affect the security of their system .

While we do agree that this is a very valid concern brought out from your side we wish to give you the following clarifications.

a. The wind power projects are highly gird dependent and any problem to the grid will adversely impact the generation of the projects which eventually is a great revenue loss and will affect the project viability. Hence adequate precautions had been taken by the wind power project developers themselves to ensure that there are no gird outages.

b. It has been seen by your good offices that whenever there is an outage of grid, the wind developers are the first to pitch in and get the rectifications done to restore normalcy which proves our dependency on grid beyond doubt. It has also been seen that we are terribly concerned on the backing down of generation due to the grid safety reasons and we have been continuously bringing this to your notice seeking your help to avoid the same.

c. While the above cited reasons are solely our business requirements, the Government also from their side does not allow our system to be energized without the System Safety Certification by the Chief Electrical Inspector to the government (CEIG) who is solely responsible for certifying the safety of the entire system.

d. The commissioning of the project will not happen without a valid CEIG approval and hence your concerns on the system and grid safety are adequately addressed by this approval given by the Government Inspectorate themselves.

e. To further give comfort on this to APTRANSCO, the system after completion of construction and on attaining a stage of technical readiness can be offered for **witnessing the Relay Co-ordination** to the field officers before the system is charged and synchronized with the APTRANSCO grid.

f. We propose APTRANSCO to Standardize Equipment Specification at each Voltage Level at Pooling Sub Station, Terminal Bay & EHV line and the same to be communicated along with Evacuation Approval for future/un-commissioned projects to enable Developer to proceed with procurement of equipment.

g. We would also commit to **go with the APTRANSCO approved vendors** in constructing our system which to a large extent would take care of the concerns on the safety being expressed by you. However in the event of any problem with the delivery lead times by the existing approved vendors of APTRANSCO, the developers should be allowed to go ahead and commission their project by sourcing the equipment from an alternate vendor.

h. Further, the inspection process is also to be left to the Developer with a condition that all the Equipment Test Certificates shall be submitted by the developer before commissioning of PSS to the grid.

i. The **Metering Equipment including the CT/PT** can still be under the inspection and acceptance scope of AP TRANSCO but there needs to be a change in the process and in order to facilitate faster working we request you to revise the process as tabulated here under

Sl. No.	Present Process	Proposed Process
1	Quality Inspection	Developer request CE Zone APTRANSCO & SE Opn APSPDCL for Quality & NABL witness. Dispatch may be recorded in MOM after successful witness.
2	Communication from Vidyut Soudha to CE Zone & APSPSDCL for NABL witness	
3	NABL witness by APTRANSCO & APSPDCL	
4	Dispatch Instruction by APTRANSCO	

The above proposed process will drastically cut down the timelines without setting aside the process of inspection and acceptance by the utility (TRANSCO & DISCOM).

he above proceedureipmentne APTRANSCO & SE Opn APSPDCL for Quality & NABL wittnessok at the above obstacles mentioned to waive

Sir if your good office considers the above points and necessary instructions are issued to the field the project Pooling station and the EHV line construction can be taken up on a fast track basis.

3. Construction Supervision

As per the prevailing practice, APTRANSCO Engineers have to be deputed for supervising the entire construction activity of the EHV lines, the Pooling Substation (PSS) and Terminal Bay (TB) including the smallest civil foundations being laid as a part of the EHV and PSS activity.

It is often found that due to lack of adequate manpower from APTRANSCO and due to their own ongoing construction activity which is a priority for them, we are unable to carry on with the construction activity as scheduled to meet the commissioning timelines.

There are many project developers who are planning to commission the projects by end of this financial year (31st March 2016) as per their commitment given to the Government of Andhra Pradesh but are apprehensive about this commissioning timelines due to the delays caused

by the inherent process of inspection and supervision at field level as well as at the corporate level involving the equipment and construction supervision.

To realize the targeted capacity addition from the Wind Power Projects in the FY 15-16, we require absolute support from APTRANSCO and the DISCOMS and we request your good offices to come up with broader guidelines on these activities, waive the approval process and facilitate faster construction.

Sir, we are in a position to assure you from all the members of our association that we are very serious to fulfill our project commissioning commitments given to the Government during the financial year 2015-16 and seek your kind support on all the issues we have raised above enabling us to speed up our project construction activity.

It is not out of place to bring to your kind notice that the States like Rajasthan and Karnataka which were able to commission large capacities in a short duration, it was possible to add the capacities due to such simplified procedures being followed by the Utility there and hence request you to kindly bring in a similar environment helping us to commission more projects and fulfill the Government's ambition of adding 4000 MW in the years to come.

We have also requested our members planning to commission their projects during this FY to give their project specific issues /requirements enabling them to start construction and commissioning of the projects as committed by them.

We will be at your disposal for any further support required from us as an association to take this forward.

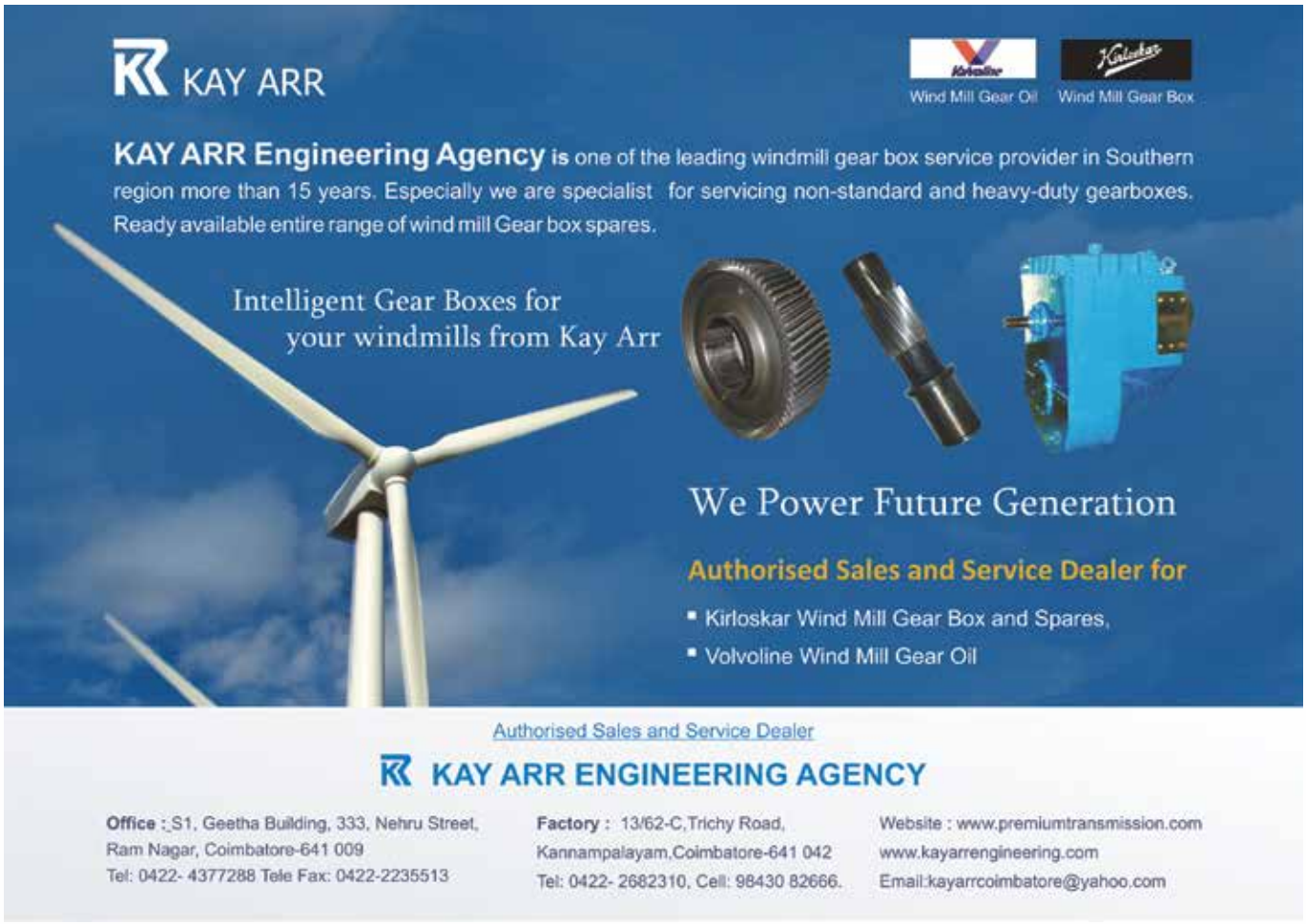
Thanking you,

Yours sincerely,
For Indian Wind Power Association

S. SRI MURALI
Secretary – IWPA AP State Council

Copy to :

1. The Secretary, Energy, Infrastructure & Investment, CRDA, Govt of AP, Hyderabad
2. The Advisor to Govt of AP, Energy Department, Govt of AP, Hyderabad
3. The VC & MD , NREDCAP, Hyderabad
4. The Director (Projects), APTRANSCO, Hyderabad.



MPERC's Draft Approach Paper on Wind Tariff

LEGISLATIVE PROVISIONS

1.1 Section 86(1) (e) of the Electricity Act 2003, mandates the State Electricity Regulatory Commissions to promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person. The Regulatory Commissions are also required to specify, for the purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution Licensee. Under Section 62, the Act empowers the Commissions to determine the tariff for the supply of electricity by a generating company to a distribution Licensee. Subsection (h) and (i) of Section 61 are relevant in so far as determination of tariff of renewable sources of energy is concerned and are reproduced below :

"61(h) the promotion of co-generation and generation of electricity from renewable sources of energy;"

"61(i) the National Electricity Policy and tariff policy;"

1.2 Section 6.4 of the Tariff Policy recognized that it will take some time for the nonconventional energy sources to compete with conventional sources of energy, hence its procurement shall be done at preferential tariffs to be determined by the Commissions and states as under:

(2)Such procurement by Distribution Licensees for future requirements shall be done, as far as possible, through competitive bidding process under Section 63 of the Act within suppliers offering energy from same type of non-conventional sources. In the long-term, these technologies would need to compete with other sources in terms of full costs.

(3)The Central Commission should lay down guidelines within three months for pricing non-firm power, especially from non–conventional sources, to be followed in cases where such procurement is not through competitive bidding.

1.3 The Central Electricity Regulatory Commission issued revised guidelines vide notification dated 06.02.2012 specifying the norms for various non-conventional sources of energy including power from wind electric generators.

In exercise of the powers vested under Section 86(1)(a), (b) and (c) read with (e), and Section 62(1) of the Electricity Act, 2003 (EA, 2003) and all other powers enabling it in this behalf, Madhya Pradesh Electricity Regulatory Commission (Commission),through this approach paper, proposes to fix norms for determination of tariff and related dispensation for the purchase of power by Distribution Licensees from wind electric generating plants in the State.

1. PROCEDURAL HISTORY

(a) Earlier, the Commission had issued a tariff order for procurement of power from wind electric generators on 11.6.2004. The control period was ended on 31.3.07. Thereafter, the Commission vide order dated 23.4.2007 issued a direction that the same provisions of tariff order dated 11.6.04 shall continue till the issue of tariff order for the next control period. The Commission then issued the second tariff order for procurement of power from wind electric generators on 21.11.2007. The control period was to expire on 31.3.2012. However, the tariff order was revised vide order dated 14.05.2010. The control period was expired on 31.03.2013 and the tariff order was revised vide order dated 26.03.2013 applicable w.e.f. 01.04.2013. The control period is to expire on 31.03.2016.

(b) On 06.02.2012, the Central Electricity Regulatory Commission (CERC) had issued revised Regulations on terms and condition for determination of tariff from new and renewable sources of energy. A comparison of CERC terms and conditions viz-a-viz the Commission's terms and conditions in respect of wind electric power shows that the CERC regulations results in better tariff.

(c) Accordingly, the Commission has considered the guidelines issued by the CERC and proposes to revise the existing norms for determination of tariff for procurement of power from wind electric generators w.e.f. 01.04.2016.

2. REGULATORY PROCESS FOR NEXT CONTROL PERIOD

(a) The Commission shall invite comments/suggestions from all stakeholders and hold a public hearing, if necessary, at the Commission's Office. After analyzing the comments, the tariff shall be determined for the revised control period.

3. APPLICABILITY OF THE ORDER

(a) The tariff Order to be issued by the Commission based on revised norms will be applicable to all wind electric generation projects in the State of Madhya Pradesh commissioned on or after the date of issue of the order for sale of electricity to the distribution licensees within Madhya Pradesh.

4. TARIFF REVIEW PERIOD/CONTROL PERIOD

(a) The control period will start from the date of issue of the revised tariff order and will close at the end of FY18-19 i.e. 31.3.2019. The tariff decided in this particular control period shall apply to all projects which are commissioned within that period and the tariff determined for a project shall remain in effect for the whole project life of 25 years from the date of grid connectivity.

5. MECHANISM FOR TARIFF DETERMINATION

(a) The Commission shall adopt levelized tariff approach to determine tariff for procurement of power from wind electric generators.

6. TARIFF DESIGN

(a) With the improvement in capacity utilization factor and the increase in MW capacity of the wind electric generators due to technological advancement (using higher hub heights, larger rotor diameters and more efficient generators to increase generation), the generation cost per unit would be lower. Therefore, the Commission expects that the capital cost per MW would be lower than in earlier years. Also, the rate of interest is declining and, therefore, the interest on debt and interest on working capital would get reduced. The following is the comparison among the existing norms as specified by the CERC Regulations dated 06.02.2012, Commission's Tariff order dated 26.03.2013 and the revised norms proposed by the Commission:

Key elements of norms	CERC Regulations dated 06.02.2012	MPERC Order dated 26.03.2013	Proposed Revised Norms
Capital Cost	5.75 Cr/MW for FY 12-13 plus indexation on changes in WPI for steel and electrical machinery (inclusive of Power Evacuation Cost)	5.96 Cr/MW (inclusive of Power Evacuation Cost)	5.00 Cr/MW (inclusive of Power Evacuation Cost)
Plant Life (Years)	25	25	25
CUF	Minimum 20%	20%	20%
Return on Equity	20% Pre Tax- First 10 Yrs. 24% Pre Tax -11th Yr. Onwards	20% Pre Tax	20% Pre Tax
O&M Expenses	9.0 Lacs/MW and with a Simple escalation of 5.72% per annum	1% of the capital cost in the first year and thereafter a simple escalation of 5.72% per year	1% of the capital cost in the first year and thereafter a simple escalation of 5.72% per year
Interest on working Capital	Average SBI Bas rate plus 350 basis point on (A) Operation & Maintenance expenses for one month (B) Receivables equivalent to 2(Two) months of energy charges on sale of electricity calculated on the normative CUF. (C) Maintenance spare @ 15% of operation & maintenance expenses	13.25% on (A) Operation & Maintenance expenses for one month (B) Receivables equivalent to 2(Two) months of energy charges on sale of electricity calculated on the normative CUF. (C) Maintenance spare @ 15% of operation & maintenance expenses.	12.50% on (A) Operation & Maintenance expenses for one month (a) Receivables equivalent to 2(Two) months of energy charges on sale of electricity calculated on the normative CUF. (b) Maintenance spare @ 15% of operation & maintenance expenses.
Interest on Debt	Average Base rate of SBI + 300 basis points	12.75 %	12.00%
Debt-equity ratio	70:30	70:30	70:30
Discounting factor (%)	--	10.20	10.20
Depreciation	5.83% per annum for first 12 years and remaining is spread over the remaining useful of Plant from 13th year onwards	7% per annum for the first 10 years and remaining 20% is spread over the remaining useful of Plant from 11th year onwards	7% per annum for the first 10 years and remaining 20% is spread over the remaining useful of Plant from 11th year onwards

7. OTHER TERMS AND CONDITIONS

a) The tariff shall be inclusive of all charges/taxes.

b) The tariff shall be firm for the project life and will not vary with fluctuations in exchange rate or on account of changes in taxes or for any other reason, whatsoever.

c) The wind electric generators with collective capacity of 10 MW and above connected at 33 kV level and above shall be responsible for forecasting their generation up to accuracy of 85% on the terms and conditions of the Indian Electricity Grid Code, as amended.

d) The reactive energy charges would also be payable by/to the developer as the case may be.

e) The distribution company in whose area the energy is consumed shall deduct 2% of the energy injected towards wheeling charges in terms of units.

f) At present, in case of third party sale/captive consumption the cross subsidy surcharge is not payable. However, it may be made applicable as and when decided by the Commission.

g) The plant would be entitled to draw power from the distribution licensee's network during start-up/shutdown period of its plant or during other emergencies. The supply availed would be billed at the temporary rate applicable to HT Industrial category notwithstanding any contrary provisions that may exist in the agreement already executed by the developer with the licensee.

h) The banking shall be applicable as per the provisions of MPERC (Cogeneration and generation of electricity from renewable sources of energy) (Revision-I) Regulations, 2010 as amended.

i) The developer shall be required to share CDM benefits with the distribution licensee as decided by the Commission.

j) Sale of Renewable Energy Certificate (REC) shall be as per Regulations of CERC notified from time to time.

Media News

Discoms can raise fresh funds at cheaper rates

Centre finalising debt restructuring plan, rules out financial bailout package

October 12, 2015

The government is finalising the contours of a debt-restructuring plan for ailing power distribution companies that would allow the utilities to access funds at cheaper rates and has ruled out a financial bail-out package from the Centre.

The proposed mechanism will allow discoms to raise fresh funds at cheaper rates of 8- 8.5 per cent instead of the existing rates of near 14 per cent.

Under the proposal, which is expected to be taken up by the Union Cabinet soon, States would be allowed to take over the discom loans by converting them into State bonds that would also have a sovereign backing. This, in turn, will facilitate cheaper borrowings for the discoms, as this will clean up their balance sheets.

The States may also be given an additional dispensation allowing for relaxation in the borrowing limit of 3 per cent of the State gross domestic product under the Fiscal Responsibility and Budget Management Act.

The plan is said to have been finalised after discussions between the Ministries of Power and Finance as well as State discoms and bankers.

The debt restructuring is expected to help eight States with the highest loans in their electricity distribution utilities — Rajasthan, Andhra Pradesh, Uttar Pradesh, Tamil Nadu, Haryana, Jharkhand, Bihar and Telangana— to clear up their balance-sheets. Together, these States have collective dues of over ₹ 2.5 lakh crore as of March 2014.

"Almost all States are on board over the financial package and one-on-one meetings are now taking place to work out State-specific reform plans," said an official familiar with the development.

Along with the financial bail-out, the Centre expects State discoms to work on reforms to improve their efficiency and lower transmission losses to prevent the need for future bail-outs.

"Discom package has many issues, largely focussed on efficiency — helping bring down interest cost, supporting the upgradation of infrastructure, ensuring that a framework is created that in future discom process cannot be allowed to continue in the path that it has. Final stages of consultations are underway to further improve this framework," Piyush Goyal, Minister of State (Independent Charge) for Power, Coal and New and Renewable Energy, had said recently.

Source: The Hindu Businessline

Amendment to Rajasthan Land Revenue Act

GOVERNMENT OF RAJASTHAN
REVENUE (GR.6) DEPARTMENT

6(28)Rev.6/2014/9 Jaipur, Dated 4/8/2014

In exercise of the powers conferred by section 100 of the Rajasthan Land Revenue Act, 1956 (Act No. 15 of 1956) the State Government hereby makes the following rules further to amend the Rajasthan Land Revenue (Allotment of Land for Setting up of Power Plant based on Renewable Energy Sources) Rules, 2007, namely:-

1. **Short title and commencement** - (1) These rules may be called the Rajasthan Land Revenue (Allotment of Land for Setting up of Power Plant based on Renewable Energy Sources) (Amendment) Rules, 2014.

   (2) They shall come into force at once.

2. **Amendment of rule 2.** - In sub-rule (1) of rule 2 of the Rajasthan Land Revenue (Allotment of Land for Setting up of Power Plant based on Renewable Energy Sources) Rules, 2007 hereinafter referred as the said rules,-

   (i) the existing clause (b) shall be substituted by the following, namely:

   "(b) "Developer" means a person who develops, and/or maintains Wind Farms, Wind Power Plant, Solar Parks and Solar Power Plant and also creates and/or maintains common infrastructure facilities for above units;"

   (ii) after the existing clause (jj) and before the existing clause (k), the following new clause (jjj) shall be inserted, namely -

   "(jjj) "Solar park" means a group of solar plants / solar power plants / solar PV Power plants / solar thermal power plants / solar farms in the same location used for production of electric power;"

3. **Amendment of rule 6.** - In rule 6 of the said rules,-

   (i) the existing sub-rule (2) shall be substituted by the following, namely;

   "(2) Annual rent shall be charged at the rate of 5% per annum of the premium as specified in sub-rule (3) for 2 years from the date of allotment which shall be enhanced thereafter for every year at the rate of 5% per annum of the previous year."

   (ii) in sub-rule (3). for the existing expression "10% of", wherever occurring, the expression "equal to" shall be substituted.

4. **Insertion of rule 12A.** - After the existing rule 12 and before the existing rule 13 of the said rules, the following new rule 12A shall be inserted, namely:-

   "**12A. Allotment of Land to the R.R.E.C. or Rajasthan Solar Park Development Company Limited.** - Land may be allotted to the R.R.E.C. or Rajasthan Solar Park Development Company Limited for setting up and developing Solar Park, on the following terms and conditions, namely:

   (i) The land shall be allotted on lease hold basis for a period of 99 years;

   (ii) The premium to be charged for the allotment of government land for setting up and developing Solar Park shall be equivalent to 25% of the DLC of the same class of agricultural land in the vicinity and shall be determined accordingly;

   (iii) Lease rent shall be payable at the rate of Rs. 1/- per acre per annum;

   (iv) The R.R.E.C. or Rajasthan Solar Park Development Company Limited, may sub-lease the leased land or part thereof for setting up and developing Solar Park for solar plant / solar power plant / solar PV power plant / solar thermal power plant / solar farm purposes;

   (v) The R.R.E.C. or Rajasthan Solar Park Development Company Limited, may levy and recover such lease rent and other charges as may determined by it, in respect of the lands sub-leased by it;

   (vi) The periods of the sub-leases shall be determined by the R.R.E.C. or Rajasthan Solar Park Development Company Limited, but such period shall not exceed 30 years, in all, in any case.

(vii) The Land shall revert to the Government free of all encumbrances and without payment of any compensation, in case the R.R.E.C. or Rajasthan Solar Park Development Company Limited or any of it's sub-lessees, use it for any purpose other than solar plant / solar power plant / solar PV power plant / solar thermal power plant, including essential welfare and supporting services or commit breach of any other condition of the lease or sub-leases; and

(viii) The sub-lessees of the R.R.E.C. or Rajasthan Solar Park Development Company Limited shall continue to be governed by all other terms and conditions prescribed in these rules and any other analogous rules that may be promulgated or orders that may be issued, in this behalf by the State Government."

By order of the Governor,

(Anil Kumar Agarwal)
Joint Secretary to Government

Copy : Copy forward to the following for information and necessary action:

1. Secy. to Hon'ble Chief Minister, Rajasthan, Jaipur.
2. Dy. Secy. (BC) to Hon'ble CM (Revenue Minister), Rajasthan, Jaipur.
3. D.S. to Chief Secretary, Rajasthan, Jaipur.
4. P.S. to Principal Secretary, Revenue Department, Jaipur.
5. P.S. to Principal Secretary, Energy Department, Jaipur.
6. Accountant General, Rajasthan, Jaipur.
7. All Divisional Commissioners, Rajasthan
8 All Collectors, Rajasthan
9 Deputy Accountant General, SRA, Rajastah, Jaipur.
10 Registrar, Board of Revenue, Rajasthan, Jaipur.
11 Director, Printing & Stationery department for publication of the Notification in the Rajasthan Gazette dated 4/08/2014 along with additional copies.
12 Managing Director, R.R.E.C., Jaipur
13 Director, Public Relation, Rajasthan, Jaipur
14 "RAVIRA" Board of Revenue, Rajasthan, Ajmer.
15 Dy. Registrar (F&A), Board of Revenue, Rajasthan, Ajmer.
16 Director, Information & Technology (Computer), Jaipur.
17. Joint Registrar, Library Judges, Supreme Court, New Delhi.
18. All Dy. Secretaries, Department of Revenue.
19. Deputy Secretary, Revenue (Gr.1) Department for uploading on website.
20. Guard file.

Joint Secretary to Government

Media News

Govt to waive transmission charges for clean power

New Delhi: To give a push to clean energy projects in the country, the government has decided to waive transmission charges for electricity generated from renewable sources, Union Minister Piyush Goyal said on Wednesday.

"We are bringing out a legal framework where all inter-state transmission of renewable energy will be at zero cost," New & Renewable Energy Minister Piyush Goyal said here.

"So renewable energy will not be charged any transmission charges across the country." he said.

The government, which has already sanctioned contracts worth Rs 38,000 crore through competitive bidding for green corridors, is identifying more such areas.

Source: The Hindu

IWPA's suggestions on Draft KERC Regulations, 2015

August 05, 2015

The Secretary
Karnataka Electricity Regulatory Commission
6th & 7th Floors, Mahalaxmi Chambers,
No. 9/2, M.G. Road, Bangalore-560 001

Respected Sir,

Sub: IWPA's suggestions on Draft "KERC (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2015

On behalf of its members, Indian Wind Power Association (IWPA) would like to express its sincere gratitude for all the kind support extended by Karnataka Electricity Regulatory Commission towards development of Renewable Energy sector in the state of Karnataka.

We would also like to appreciate the initiative taken by KERC to invite views /suggestions on Draft "KERC (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2015 and the proposed amendment to bring in consistency with the National Renewable Purchase targets and the current market scenario.

Further, this Hon'ble Commission has called for opinion from various stakeholders on its proposed Regulations on RPO and its compliance. We would like to thank this Hon'ble Commission for giving this opportunity and hope that this process will certainly strengthen and consolidate the proposed Regulations.

Our views on the proposed Regulations are as follows:

IWPA's Comments/Submissions on Draft "KERC (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2015

1. Short Title application and commencement. –

   (i) These Regulations shall be called the Karnataka Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2011.

   (ii) These Regulations shall extend to the whole of the State of Karnataka.

   (iii) These Regulations shall come into force from the date of publication in the official gazette

   IWPA Submission: No Comments

2. (dd) New Addition:

   Proposed by KERC: 2(dd). "Contract Demand" means the load expressed in MW as mutually agreed to between the Distribution Licensee and the consumer as entered in the Power Supply Agreement.

   IWPA Submission: No Comments

3. These Regulations shall apply to:

(ii) Any other person consuming electricity generated from captive generating plant or plants, using other than renewable sources and having a total capacity exceeding 5 MW; and

Proposed by KERC: (ii) Any captive consumer consuming electricity generated from grid connected captive generating plant or plants having a total capacity exceeding 5 MW within the state of Karnataka and using fuel other than renewable sources: and

IWPA Submission: The proposed amendment will facilitate the captive generators to install and consume energy within the state which will definitely bring in investment in the form of Captive generators in the state.

(iii) Any person consuming electricity with a contract Demand exceeding 5 MW procured by open access from sources other than renewable sources of energy.

Proposed by KERC: (iii) any person having a contract Demand exceeding 5MW with a distribution licensee and procuring electricity exceeding 1mw through open access through fuel sources other than renewable sources of energy

Provided that a person not having any contract for power supply with the distribution licensee and procuring electricity exceeding 1MW through open access from fuel sources other than renewable sources of energy, shall also be subjected to renewable purchase obligation as specified in these regulation.

IWPA Submission: We welcome the Hon'ble Commission proposed amendment which is in accordance with the applicability of renewable purchase obligation on the obligated entities as considered by Commission in principle regulation.

Along with this we request the commission to mandate Distribution licensees to notify the details of renewable sources of generation and consumption in the area of ESCOMs on their respective websites every month and captive and open access consumers to provide details to respective ESCOMs

Or

Hon'ble Commission may publish the same on KERC website after receiving the inputs from all ESCOMs, captive and open access consumers to provide details of status of RPO in the state of Karnataka

The details can be listed in following format:

a. List of Captive Consumer, quantum of their consumption of electricity in the area of ESCOM/s with breakup of NCE and other sources of energy

b. List of Open Access Consumer, quantum of their consumption of electricity in the area of ESCOM/s with breakup of NCE and other sources of energy

c. Total generation of electricity from NCE Source in the Distribution licensee's area with breakup of NCE and other sources of energy

The said proposed amendment will bring in enforcement mechanism for captive power producers and open access consumers of the state to make them accountable to purchase the minimum quantum of energy from the renewable sources.

4. Quantum of purchase of electricity from Renewable Sources of Energy.-

Every Distribution Licensee shall purchase a minimum quantity of electricity from renewable sources of energy expressed as a percentage of its total procurement during a year as specified below :

ESCOM	RPO for RE sources other than Solar	Solar RPO
BESCOM	10 %	0.25 %
MESCOM	10 %	0.25 %
CESC	10 %	0.25 %
HESCOM	7 %	0.25 %
GESCOM	7 %	0.25 %
Hukkeri Society	7 %	0.25 %

Provided that, a distribution licensee may in case of non-availability of solar power generated in the State of Karnataka procure from other renewable sources of energy or REC to the extent of shortfall in its RPO in any year.

Proposed by KERC: Every Distribution Licensee shall purchase a minimum quantity of electricity from renewable sources of energy expressed as a percentage of its total procurement during a year as specified below:

a) Non Solar

RPO Non Solar						
Distribution Licensees	Prevailing	2015-16	2016-17	2017-18	2018-19	2019-20 and onwards
BESCOM	10%	10%	12%	13%	14%	15%
MESCOM	10%	10%	14.50%	15%	15.50%	16%
CESC	10%	10%	12%	13%	14%	15%
HESCOM	7%	7%	7.50%	8.50%	9.50%	11%
GESCOM	7%	7%	5.50%	6%	7%	8%
HRECS	7%	7%	7.50%	8.50%	9.50%	11%
Deemed Licensees	0%	0%	5.50%	6%	7%	8%

b) Solar

RPO Solar						
Distribution Licensees	Prevailing	2015-16	2016-17	2017-18	2018-19	2019-20 and onwards
BESCOM	0.25%	0.25%	0.50%	0.75%	1%	1.50%
MESCOM	0.25%	0.25%	0.75%	1%	1.50%	2%
CESC	0.25%	0.25%	0.50%	0.75%	1%	1.50%
HESCOM	0.25%	0.25%	0.50%	0.75%	1%	1.50%
GESCOM	0.25%	0.25%	0.50%	0.75%	1%	1.50%
HRECS	0.25%	0.25%	0.50%	0.75%	1%	1.50%
Deemed Licensees	0.00%	0.00%	0.50%	0.75%	1%	1.50%

Provided that, HRECS and deemed licensees procuring bulk power partly or wholly from ESCOM(s) shall be deemed to have complied with the RPO to the extent of such procurement from ESCOM(s), if such ESCOM(s) have complied with the RPO.

Illustration: If a deemed licensee procures 500MU wholly from BESCOM, its RPO would be 35MU and if BESCOM has met its RPO w.r.t the quantum of power purchased by it including the quantum purchased for the deemed licensee (500MU), the deemed licensee is deemed to meet the RPO of 35 MU

IWPA Submission: Keeping a constant minimum quantum of renewable purchase percentage for long years without any increase will wallop the investments in the sectors, in turn affecting the progress of Industry. We welcome the step of this Hon'ble commission to freeze the target trajectory which is in line to the country NAPCC target.

Fixing the minimum quantum and providing a trajectory of RPO percentage provides a vision for the investors for planning their investment in RE sources.

We would like to request the Hon'ble Commission based on the past and current scenario in the state of Karnataka.

Based on KERC published "The status of RPO compliance by ESCOMs" and "By consumers availing open access" in its Annual Reports w.r.t the RPO compliance for the year 2012-13 and 2013-14 for Non solar and solar obligation for last 2 years as quoted in the Table 1: Status of Compliance by ESCOMs - KERC Annual Reports show that the ESCOMs are now managing to achieve the minimum target fixed by the commission.

Table: 1 Status of Compliance by ESCOMs - As per KERC Annual Reports					
ESCOM	Quantum of Purchase in MU	Non Solar-MU	Non Solar RPO Achieved%	Solar MU	Solar RPO Achieved%
FY12					
BESCOM	25657.71	3481.36	13.57%	3.94	0.02%
MESCOM	4217.92	590.86	14.01%	0	0.00%
CESC	5681.98	707.19	12.45%	0	0.00%
HESCOM including HRECS	10259.82	784.37	7.65%	3.52	0.03%
GESCOM	7177.16	486.6	6.78%	0.5	0.01%
Total	52994.59	6050.38	11.42%	7.96	0.02%
FY13					
BESCOM	27851.09	3047.068	10.94%	10.15	0.04%
MESCOM	4451.18	640.94	14.40%	0	0.00%
CESC	6130.75	611.62	9.98%	0	0.00%
HESCOM including HRECS	11339.07	838.91	7.40%	3.6	0.03%
GESCOM	7383.34	549.65	7.44%	2.7	0.04%
Total	57155.43	5688.188	9.95%	16.45	0.03%

However the achieved RPO % vary year on year basis which is projected in Table 2, based on the data collected from the KERC- Annual Report 2014.

Table-2

KERC Annual Report -2014	FY09	FY10	FY11	FY12	FY13	FY14*
Sources	Energy in MU	Energy in MU	Energy in MU	Energy in MU	Energy in MU	Energy in MU*
KPCL Hydel	12975.78	11654.76	9977.17	14061.75	9996.29	12586.14
KPCL Thermal	10730.85	12647.52	10946.85	12884.83	12924.77	14228.17
Central Gen. St.	10168.84	10584.79	10575.45	11229.76	11742.45	12292.25
IPPs	726.45	530.94	2025.03	3412.49	6189.93	6273.75
Renewable	4402.29	5017.73	5635.2	6148.75	5434.21	5617.4
Short-term	1963.49	1798.64	7814.67	5310.36	11046.66	7016.79
UI & Inter ESCOM adjustment	993.68	920.76	144.66	-221.19	-151.21	
Total Purchase in MU	41961.38	43155.14	47119.03	52826.75	57183.1	58014.5
Percentage of Renewable Purchased	10.49%	11.63%	11.96%	11.64%	9.50%	9.68%*

In such situations the utilities may not be willing to sign PPA with the renewable generators. And it shall become difficult for the generators to make the distribution licensees of the state to sign the PPA based on renewable energy projects which already met the minimum renewable purchase obligation.

We request the Hon'ble Commission not to allow the utilities to sign PPA based on fixing the minimum RPO percentage criteria.

4 (ii) Every Grid Connected Captive consumer specified in clause 3(ii) above shall purchase a minimum quantity of 5 % of its consumption of energy from captive sources from renewable sources of energy.

Proposed by KERC: Every grid connected captive consumer specified in clause 3(ii) above shall purchase a minimum quantity of its consumption of the energy from the captive sources during a year from renewable sources of energy, as specified below:

RPO - Grid Connected Captive						
	Prevailing	2015-16	2016-17	2017-18	2018-19	2019-20 and onwards
Non Solar	5%	5%	5.50%	6%	6.50%	7%
Solar	0.00%	0.00%	0.50%	0.75%	1%	1.50%

4 (iii) Every Open Access Consumer specified in Clause 3(iii) above shall purchase from renewable sources of energy a minimum quantity of 5% of its consumption through Open Access sources.

Proposed by KERC: Every Open Access Consumer specified in Clause 3(iii) above shall purchase a minimum quantity of its consumption through Open Access sources during a year from renewable sources of energy, as specified below:

RPO –Open Access Consumer						
	Prevailing	2015-16	2016-17	2017-18	2018-19	2019-20 and onwards
Non Solar	5%	5%	5.50%	6%	6.50%	7%
Solar	0.00%	0.00%	0.50%	0.75%	1%	1.50%

IWPA Submission: In the principle Regulation the Solar RPO is applicable only on DISCOMS which was 0.25% with no defined trajectory. Now the Hon'ble Commission has proposed a trajectory for Solar RPO on ESCOMs as well as on the Captive and Open Access Consumers this will undeniably drive demand for solar power in the state.

8. Non-Compliance of RPO by Distribution Licensee. - (1) If a distribution licensee or other consumer specified in clause 3 above fails to comply with the renewable purchase obligation as specified in these regulations during any year, the Commission may direct the distribution licensee or such other consumer to deposit such amount as the Commission may determine into a separate fund, to be created and maintained as directed by the Commission.

Proposed by KERC:8 (1) If a distribution licensee or other consumer specified in clause 3 above fails to comply with the renewable purchase obligation as specified in these regulations, on or before 31st May of the immediately following year.

Illustration: For example, the RPO compliance as on 31.03.2016 could be complied with by purchasing RECs or Renewable Energy on or before 30.05.2016

Provided that any distribution licensee or other consumer specified in clause 3 above failing to meet the RPO for any year within the time specified above, shall purchase RECs to the extent of 110% of quantum of shortfall in meeting RPO, by 30th June of the immediately following year, failing which action under 142 of the Electricity Act 2003 shall be initiated.

IWPA Submission: We request the Hon'ble Commission not to carry forward the RPO targets for the next year, As the Supreme Court/ APTEL/most of the States now bringing stringent enforcement of RPO orders and made the utilities to comply with the Commission's orders. And the expenditure on purchase of shortfall for fulfillment of RPO by RECs and/or actual power procurement shall not be passed through to consumers.

8 (2) The distribution licensee or other consumer shall utilize the fund so collected for promoting renewable sources of energy or energy conservation measures with the prior approval of the Commission from time to time.

Proposed by KERC: Deleted

IWPA Submission: No Comments

In light of the above, we would again like to congratulate this Hon'ble Commission for its effort to further consolidate the RPO Regulation with trajectory on all obligated entities and enforcing them to purchase REC for noncompliance, further impose penalty in the form to purchase extra REC to fulfill the compliance.

The Association herein, hopes that concerns and issues raised by us will get proper attention from Hon'ble Commission. Further, we request Hon'ble Commission to provide an opportunity to give a presentation and urges for the leave to submit such additional documents and arguments to be advanced in the Public Hearing.

Thanking You

Yours faithfully
For Indian Wind Power Association
(Karnataka State Council)

(Narayanan. N)
Coordinator

Renewable Energy News Digest

Maharashtra seeks to ease power open-access rules

Purchase of power in day-ahead market on exchanges likely; MERC seeks views from stakeholders on draft rules

Electricity consumers in Maharashtra might be able to buy power from sources other than distribution companies once the draft Distribution Open Access Regulations 2015 released by the Maharashtra Electricity Regulatory Commission (MERC) are notified.

The MERC has sought suggestions from stakeholders on the draft rules.

The proposals allow open access to consumers with contract demand of at least 500 KW against the current 1 MW threshold. They also permit sourcing power from multiple sources, which is restricted at present. Consumers can buy power from the day-ahead market on power exchanges, which the current regulations do not allow.

The MERC's Distribution Open Access Regulations 2014 have been contested in the Bombay High Court by various organisations.

The draft rules propose to remove other restrictions hampering open access like mandatory reduction in contract demand for one month and procurement of power round the clock.

The state-run MahaVitaran supplies power to over 22.5 million consumers in Maharashtra, while Tata Power, Reliance Infrastructure and BrihanMumbai Electric Supply and Transport are distributors in Greater Mumbai.

"The draft regulations address various constraints to open access. Enabling industries and commercial establishments to participate in the day-ahead market and allowing consumers up to 500 KW open access are key changes," Rajesh K Mediratta, director, business development, Indian Energy Exchange, told Business Standard.

MG Raoot, managing director and chief executive officer of Power Exchange India, said the day-ahead access provided a big opportunity to consumers to source cheap power. The choice to procure power from multiple sources would help in promoting the intra-state market, he added.

Jayant Deo, former MERC member, said there was no way a distribution licensee could deny open access. "The MERC has proposed a schedule for processing applications and has ensured all information is available on its website. Banking is permitted in renewable power," he pointed out.

Source: Business Standard

In solar, small can be beautiful

A tale of two countries Rooftop solar panels in Germany

Unlike Germany, much of India's investment in solar has been in large-scale or 'utility solar'

Travelling through the German countryside takes one back to Rachel Carson's Silent Spring, which chronicled the detrimental effects of pesticides on the environment. The landscape outside Berlin is a green expanse, like an endless golf course, but somehow melancholic: there are no birds or animals to be seen across acres of what seems like an assiduously cultivated forest. Even in the crisp autumn air and clear sky, the ravages of industrial excess cannot be forgotten. But that grimy past has also given birth to an enduring sense of environmental awareness. Germany is showing the world how to move out from coal and nuclear to renewables. And, it is doing it the Schumacherian way.

Lessons for India?

Does such a transition to renewables hold out lessons for India? It will be readily argued that the two economies are not comparable – Germany's per capita income even in purchasing power parity terms, at $43,000, is eight times India's. India's electricity consumption per capita is 131 kwH per annum, against 1,731 kwH in the case of Germany. India stresses its right to the atmosphere to meet basic energy needs; it has committed to reducing the 'energy intensity' of its GDP without committing as such to absolute emission reductions in the near future.

Germany has committed to an absolute reduction in emissions, by 40 per cent over 1990 levels in 2020, and finally 'decarbonising' its economy by 2050. Both countries, however, have chosen to rely on wind and solar to achieve their respective climate-related goals.

Renewables, principally wind and biomass (10 per cent each), produce close to 30 per cent of Germany's electricity (solar is at 7 per cent), whereas in India renewables produce over 10 per cent of total electricity, two-thirds of it coming from wind.

It is here that India can learn from Germany's solar experience. If Germany, with its vastly higher demand for household and industrial energy, is able to service its needs through renewables output (the grid at times is unable to cope with electricity from solar and wind), there is no reason to believe that it cannot happen here, when climatic conditions are better.

Green power to the people

India's investment interest in solar has risen sharply, but unlike Germany most of it is in large scale or 'utility solar'. A paper by Harry Wirth of Fraunhofer Institute for Solar Energy Systems, headquartered in Freiburg, Germany, points out that the 38.5 GW of PVs installed in that country is distributed over 1.5 million power plants. This lies at the root of Germany's energy transition – that it is actually a socio-political movement to "transfer 'power' from the utilities to the people," to quote German Green Party MP, Barbel Hohn.

Hohn is speaking for a sizeable community of 'green' entrepreneurs who grew up participating in the anti-nuclear movement of the 1970s and 1980s. Eva Stegen is one such individual, who heads a utility that produces power through micro-hydel, solar and 'co-generation'. ESV, organised as a cooperative by a group of friends who were active in this agitation, today supplies electricity to consumers in Berlin, while being headquartered in Schonau, a picturesque village in the southern 'black forest' region. Says Stegen: "What began as a protest against the US trying to use Germany to station nuclear warheads culminated in a total rejection of nuclear power after Chernobyl in 1986."

With climate change concerns ruling out coal as a long-term option, a switch to renewables was inevitable. Fukushima in 2011 spelt the death knell for the nuclear power industry in Germany, with Chancellor Merkel deciding to phase it out in deference to the public mood. As Hohn says, "the cost of nuclear power has not come down in 50 years, whereas that of solar power has come down 80 per cent in 10 years."

Price holds the key

A February 2015 report by Crisil and PHD Chamber on India's solar sector observes that "the technology curve for solar power is evolving. In the last two years…average solar tariff rates have declined from ₹ 15 per kWh to ₹ 8 per kWh". However, government support is critical at least till it falls to ₹ 5 per kWH which the Centre has promised to achieve by December 2015. Germany's experience tells us that falling costs of solar output as a result of higher grid feed by renewables — the prices on the spot trading exchange are actually falling — have little to do with the scale of the solar power plants. It is the mass production of silicon PV modules by China that is driving down prices. India can therefore push decentralised, rooftop solar without compromising its electricity output goals – more so because land is scarce.

It is, however, hard to visualise a concerted shift to decentralised production in the absence of civil society awareness. Besides, the fossil fuel lobby will be at work to project renewables as 'pie in the sky'. The German transition too, met with resistance from coal and nuclear utilities. The German government has reduced the feed-in tariff incentive, leading to a decline in rooftop investor interest, allegedly under pressure from the utilities.

The real transition, however, has to take place in consumption patterns. Alternative forms of energy, solar included, are not without technological limitations – in the case of solar, for instance, it is the dependence on fossil fuel derivatives to manufacture PVs. The Gandhian saying that there isn't enough going around to satisfy greed has never seemed truer today, with India's rich flaunting standards comparable to their counterparts in the West — unmindful of poverty or environmental distress.

Source: The Hindu Business Line

ANZ 'will not finance' dirty coal plants and pledges $10bn for clean energy

Bank rules out funding 'conventional coal-fired power plants' that do not use proven technologies to significantly reduce emissions

ANZ bank has pledged not to finance traditional coalmining projects and to provide at least $10bn in funding for renewable energy, reforestation and energy efficiency.

In the most significant steps yet by one of Australia's big four banks on climate change, ANZ said its new policies would help a "gradual and orderly transition" from fossil fuels to clean energy such as solar and wind.

The bank has ruled out funding "conventional coal-fired power plants" that do not use commercially proven technologies that significantly reduce carbon dioxide emissions below 800 kilograms per megawatt hour.

The $10bn commitment, over five years, will fund a range of low-carbon initiatives such as renewables, low-emissions transport, reforestation and carbon capture and storage (CCS).

CCS has been hailed by the coal industry as a way to prolong the viability of fossil fuels. However, the technology, which captures emissions and stores them underground, is very much in its infancy, with only one commercially operational plant – in Canada – fitted with CCS.

In its climate statement, ANZ said: "We understand some of our stakeholders view our financing of fossil fuel industries as a material risk and in direct conflict with our stated position on the need to reduce greenhouse gas emissions.

"Today, around 40% of the world's electricity comes from coal-fired power stations and coal remains the cheapest source of fuel. We therefore consider that decarbonisation of the economy must be managed responsibly and over time."

ANZ has come under fire from climate activists due to its position as Australia's largest lender to fossil fuel projects, backing the controversial Maules Creek mine in New South Wales.

But ANZ said it was committed to the internationally agreed target of limiting global warming to 2C above pre-industrial times.

The bank said it would transparently report its progress on climate and set targets to reduce its own emissions.

Australia three other largest banks – Westpac, Commonwealth Bank and NAB – are all signed up to sustainability commitments for their lending. But environmental groups have pressed them to do more by ruling out investment in coal projects, as overseas banks have done with Adani's huge Carmichael mine in Queensland.

Last week the governor of the Bank of England, Mark Carney, warned insurers of a potential financial crisis due to exposure to climate change risks.

"The challenges currently posed by climate change pale in significance compared with what might come," Carney said. "The far-sighted amongst you are anticipating broader global impacts on property, migration and political stability, as well as food and water security. So why isn't more being done to address it?"

The chief executive of the Australian-based Investor Group on Climate Change, Emma Herd, welcomed ANZ's statement.

"There's been a lot of work going on behind the scenes over the last 12 to 18 months on how to measure carbon risk, and this is the first time we've seen an Australian bank come out so specifically on the measures they will take," she said.

"We are also seeing ANZ factor the 2C target into their business practice, to articulate what it means for them. AGL and BHP have also done this recently. We are seeing a consensus emerge around that 2C target."

Herd said the investment in clean energy and related measures was "very significant".

"The dollar commitment is significant but the signal it sends is more important, especially when you consider that this applies to ANZ's operations in Asia," she said. "Australia has a carbon-intensive economy and companies need to have a plan on how to manage their carbon risk."

According to University College London, 90% of Australia's known coal reserves must be left unburned to keep the world on track to avoid warming above 2C. Analysis released by AGL last year showed that 75% of Australia's ageing coal-fired power stations were operating beyond their "useful life" but that it was too expensive to shut them down.

Source: http://www.theguardian.com

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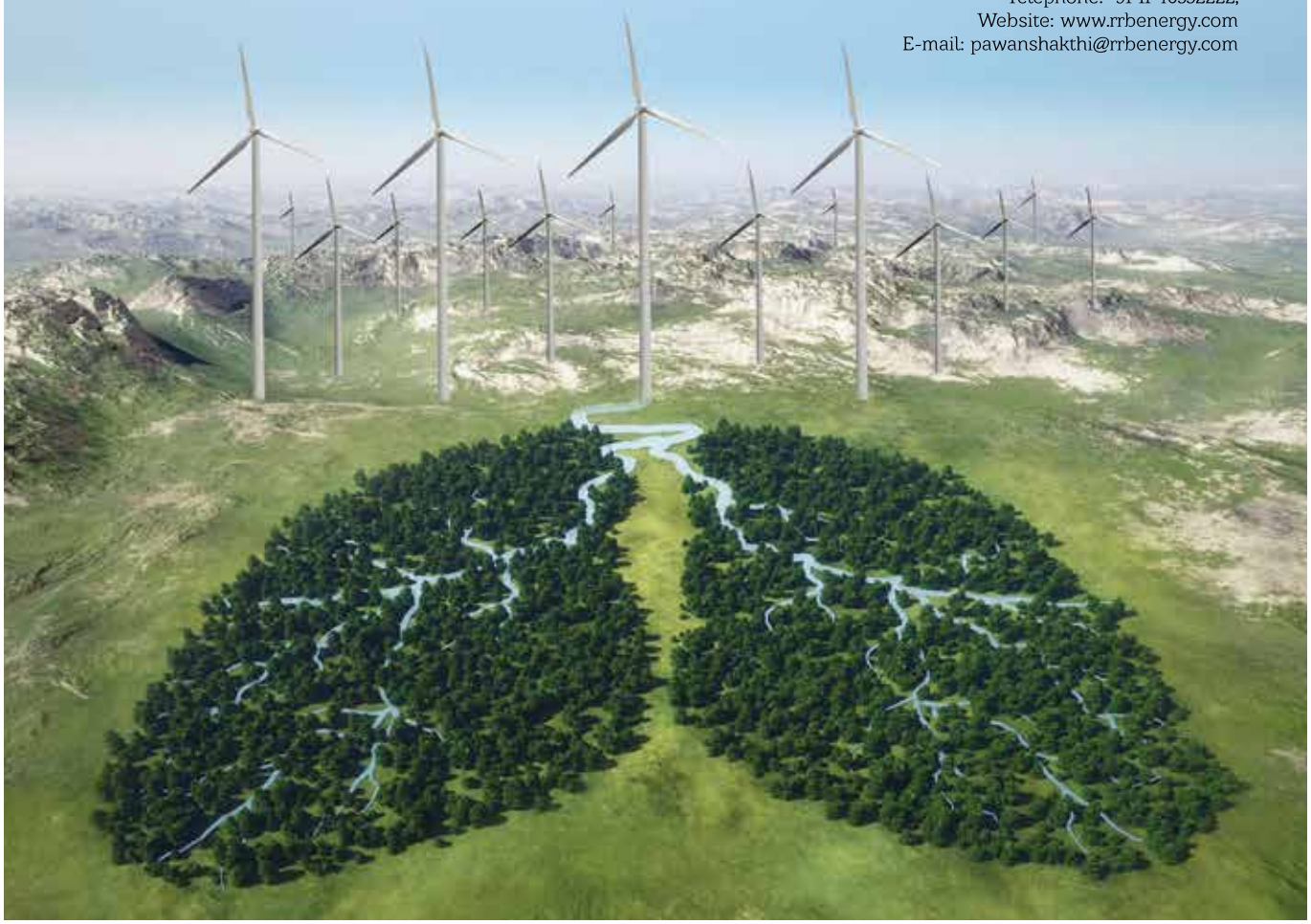

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