# ANDHRA PRADESH POWER COORDINATION COMMITTEE VIDYUT SOUDHA: VIJAYAWADA

From
Chairman, APPCC &
CMD/APTRANSCO,
Vidyuth Soudha,
Gunadala,
Vijayawada.

To The Secretary, APERC, 4<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Lakdi-Ka-Pul, Hyderabad.

Lr.No.CMD/CE/IPC & PS/NCE/F.Wind/D.No. 42 /18, Dt:27.11.2018

Sir,

Sub: APPCC - IPC - NCE - Amendment of Andhra Pradesh Electricity Regulatory Commission Regulation No.2 of 2016 of the Principle Regulation No.2 of 2016 (interim Balancing and Settlement Code for Open Access Transactions) - Reg.

Ref: APERC Regulation No.2 of 2016 dated 05.01.2016.

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- 1. Hon'ble Commission has issued and notified the Andhra Pradesh Electricity Regulatory Commission (Interim Balancing and Settlement Code) Regulation, 2006 (Regulation No.2 of 2006) in A.P. Extra Ordinary Gazette on 11-08-2006.
- 2. The said Principal Regulation No.2 of 2006 contained the guidelines to the Licensees and intra-state Open Access users in the State of Andhra Pradesh, in the matters of scheduling of Open Access transactions, meter readings, energy accounting & settlements at entry points & exit points, banking conditions for Mini-Hydel and Wind Power Projects etc.
- 3. This Regulation No.2 of 2006 was first amended vide Regulation No.1 of 2013 and notified on 02-05-2013 and on second occasion another vide Regulation No. 2 of 2014 notified on 01-04-2014, to be in line with both Solar Power Policies issued vide G.O.Ms.No.39, dated 26-09-2012 and G.O.Ms.No.44, dated 16-11-2012.
- 4. The Government of Andhra Pradesh in the year 2015 has again issued new Solar Power Policy, 2015 and new Wind Power Policy, 2015 vide G.O.Ms.No.8, dated 12-02-2015 and G.O.Ms.No.9, dated 13-02-2015 respectively by superseding the earlier Solar Power Policy, 2012 and Wind Power Policy, 2008 inter alia, to meet the twin objectives of energy security and clean energy development.
- 5. In the said background, the Hon'ble Commission issued amendment to the APERC Regulation No.2 of 2006 vide Regulation No.2 of 2016 on 05.01.2016 to be in line with the Andhra Pradesh Solar Power Policy, 2015 and the Andhra Pradesh Wind Power Policy, 2015. The extract of the amendments is as follows:
- "2. (i) The following Para shall be added as 8.5 after 8.4.

The Scheduled consumers sourcing power from such Solar Power Projects as mentioned in the Andhra Pradesh Solar Power Policy, 2015 issued vide G.O.Ms.No.8 dated 12-02-2015 shall be entitled to avail reduction in contracted demand with

Discom for a period of five (5) years from the date of commissioning of such projects. The reduction in contracted demand shall be computed based on the average Solar Power consumption during hourly time block period (s) in a billing month i.e., total solar power consumption (kVAh) in a billing month divided by the number of hours in the billing month.

(ii) The Appendix-3 in the Principal Regulation is hereby substituted as follows:

#### Appendix-3

Terms & conditions for banking facility allowed to Wind / Solar / Mini-Hydel power generators:

- 1) Banking allowed during all the 12 months.
- 2) The energy injected in to the grid from such Solar and Wind Power Projects as mentioned in G.O.Ms.No.8, dated 12-02-2015 and G.O.Ms.No.9, dated 13-02-2015 from the date of synchronization to the Commercial Operation Date shall be considered as deemed banked energy.
- 3) Drawals are subject to the following conditions: The Banking year shall be from the 1<sup>st</sup> day of April to 31<sup>st</sup> day of March of the succeeding year (i.e. Financial Year).
  - a) Banking charges shall be in kind @ 2% of the energy delivered at the point of drawl.
  - b) Drawals from banked energy shall not be permitted during the five (5) month period from 1<sup>st</sup> April to 30<sup>th</sup> June and 1<sup>st</sup> February to 31<sup>st</sup> March of each financial year. In addition, Drawal of banked energy during the Time of the Day (TOD) applicable during peak hours, as specified in the respective Retail Supply Tariff Order, shall also not be permitted throughout the year.
  - c) The energy banked between the period from 1<sup>st</sup> April to end of 31<sup>st</sup> January of each financial year which remains unutilized as on 31<sup>st</sup> January, shall be deemed to have been purchased by DISCOMs as per the wheeling schedule. The energy credited in to bank during the month of February and March of each financial year will be carried forward to the month of April of the next financial year for the credit of the banking account for the next year.
  - d) Generators have to communicate time block wise banked energy withdrawal schedule and allocations to respective Open Access/Scheduled consumers at least ten (10) days before the commencement of billing cycle.
  - e) The purchase price payable by the Discoms for unutilized banked energy will be equivalent to 50% of the Pooled Cost of Power Purchase, applicable for that financial year, as determined by the Commission under RPPO / REC Regulation (1 of 2012). Discoms shall settle such purchase transactions with the generators by 31<sup>st</sup> March of each year.

Provided the unutilized banked energy from such Solar and Wind Power Projects and for such operative periods as mentioned in G.O.Ms.No.8, dated 12-02-2015 and G.O.Ms.No.9, dated 13-02-2015 shall be considered as deemed purchase by Discom(s) at the Pooled Power Purchase cost, applicable for that financial year, as determined by the Commission under RPPO/REC Regulation (Regulation No.1 of 2012). Discom(s) shall settle such purchase transactions with the generators by 31<sup>st</sup> March of each year".

- 6. In this connection APDISCOMs submits the following for consideration of APERC and for amendment to the said APERC Regulation No.2 of 2016.
  - a. As per the APERC regulation 2 of 2016 (amendment to the Andhra Pradesh Electricity Regulatory Commission (interim Balancing and Settlement Code) Regulation, 2006 (Regulation No.2 of 2006) the projects established under Wind and Solar Policy 2015 are eligible for the following incentives.

"Energy injected into the grid form the date of synchronization to commercial operation date (COD) will be considered as deemed energy banking".

"The unutilized banked energy shall be considered as deemed purchase by DISCOM(s) at the pooled power purchase cost as determined by the APERC for the applicable year. Energy settlement shall be done on monthly basis".

b. The incentive provided by various states with regard to purchase of unutilized banked energy is as follows:

Tamilnadu: 75% of applicable wind/solar tariff.

Maharashtra: unutilized banked energy limited to 10% and purchased at

pooled cost.

Rajasthan: only 10% banked energy at 60% of energy charges of large

industrial tariff

Gujarat: all access at APPCC for open access, captive wind/solar.

Karnataka: 85% of applicable tariff.

Madhya Pradesh: Solar at APPCC and for wind Rs.2.50 paise per Kwh.

c. It is to submit that the pooled cost trend since inception of the regulation 2 of 2012 is as follows:

| 1       | O.P.No.    |            | Pooled Cost (Rs./Unit) |
|---------|------------|------------|------------------------|
| 2011-12 | 62 of 2012 | 29.06.2013 | 2.69                   |
| 2012-13 | 76 of 2013 | 28.12.2013 | 3.28                   |
| 2013-14 | 33 of 2014 | 31.05.2014 | 3.38                   |
| 2014-15 | 29 of 2015 | 07.11.2015 | 3.44                   |
| 2015-16 | 52 of 2017 | 06.01.2018 | 3.65                   |
| 2016-17 | 03 of 2018 | 03.03.2018 | 3.74                   |

From the above it is observed that the pooled cost has been in increasing trend year after year so also there is substantial increase in NCE capacity addition, i.e, mostly wind and solar power capacity.

 On the other hand the tariffs for Wind and Solar power projects in the country under competitive bidding have been in steep down trend as shown below:

#### II. WIND:

| Sl.No. | Bidding Agency Lowest Tariff (Rs./Unit) Date of bid conclusion |      |          |
|--------|--|------|----------|
|        | SECI 1000MW  | 3.46 | Feb 2017 |
|        | SECI 1000MW  | 2.64 | Oct 2017 |
|        | GUVNL 500MW  | 2.43 | Dec 2017 |
| 4      | SECI 200MW   | 2.44 | Feb 2018 |

#### III. SOLAR:

| Sl.No | Name of the         | Name of the State     | Lawret to iff | D-46 -6:1   |
|-------|---------------------|-----------------------|---------------|-------------|
|       | project             | Maine of the state    | Lowest tariff | Date of bid |
| 1     | p. 0,000            | 1.                    | discovered in | conclusion  |
| 1     | Anauth              |                       | Rs /unit      | _           |
| '     | Ananthapur Solar    | Andhra Pradesh        | 3.50          | Dec 2016    |
| -     | Park, APGENCO       |                       | 3.30          | _           |
| 2     | Rewa Solar Park     | Madhya Pradesh        | 3.30*         | Feb-2017    |
| -     | 250                 |                       | 3.30          |             |
| 3     | 250 MW Kadapa       | Andhra Pradesh        |               | April 2017  |
|       | Solar Park          |                       | 3.15*         |             |
|       |                     |                       |               |             |
| 4     | Bhadla solar park   | Rajastan              | 2.44*         | May 2017    |
| _     |                     |                       | 2.44*         |             |
| 5     | NTPC 750 MW NP      | Andhra Pradesh        |               | May 2018    |
|       | Kunta Solar Park    |                       | 2.72*         | ,           |
| ,     | CEC:                |                       |               |             |
| 6     |                     | Andhra Pradesh        |               | July 2018   |
| - 1   | Kadapa Solar        |                       | 2.70*         | ,           |
| - 1   | Park                | 1                     |               |             |
| 7.    | SECI, ACME Solar    | ISTS II Across India  |               | July 2018   |
|       | Holding0073         | is to a field so maid | 2.44          | July 2016   |
|       | - Marria Da 0 07(1) | A/I-                  |               |             |

<sup>\*</sup>Trading Margin Rs. 0.07/kWh extra.

- d. Further, Hon'ble Commission vide orders dated 07.07.2018 in O.P.No.5 of 2017 accorded approval to APDISCOMs for procurement of Wind Power through competitive bidding from 01.04.2017 onwards.
- e. The Wind and Solar Power projects availing Open Access are exempted from paying transmission and Distribution charges to the utilities. Further, the Generators who have commissioned their projects under the new Wind power policy, 2015 and solar power policy 2015 period are eligible for 100% pooled cost towards the unutilized banked energy. Due to increased Wind and Solar capacity addition, the quantum of banked energy from the Wind and Solar generators under Open Access has been increasing considerably.
- f. As seen from the above, it is evident that the Wind and Solar tariffs realized in competitive bidding are much lesser than the pooled cost.
- g. Further it is to submit that since the pooled cost is increasing from year to year which is at present Rs.3.74 per unit for the FY2016-17 applicable for FY2017-18

and that as per the provisions of the Wind and Solar power policy, the projects commissioned during this period are eligible for 100% pooled cost for their unutilized banked energy. Apart from the above this incentives is available for a period of ten (10) years from the date of commissioning of the project. As such since pooled cost is much higher than the tariff of power purchase available in the open market, the said regulation cause substantial revenue loss to APDISCOMs, besides no income towards Transmission or Distribution Charges. In case of Solar power projects injecting at 33KV or below the distribution losses are also exempted.

7. In view of the above and the precarious financial position of APDISCOMs it is requested, the Hon'ble Commission may be pleased to make appropriate amendment to the regulation 2 of 2016 (Amendment to the regulation 2 of 2006) to the extent "that for all the Wind and Solar power generators the unutilized banked energy by the end of the year shall be deemed to be purchased by the DISCOM at 50% pooled cost of the applicable year, instead existing of 100% pooled cost".

Encl: Extracts as stated.

Yours faithfully,

Chairman, APPCE & CMD/APTRANSCO

Copy to:

The Chairman and Managing Director/Corporate Office/APSPDCL D.No:19-13-65/A, srinivasapuram, Kesavayanagunta, Tiruchanoor Road, Tirupati - 517 503.

The Chairman and Managing Director/Corporate Office/APEPDCL, Seethammadhara, Visakhapatnam.

#### GOVERNMENT OF ANDHRA PRADESH ABSTRACT

ENERGY, INFRASTRUCTURE & INVESTMENT DEPARTMENT - Development of Solar Power in Andhra Pradesh - Andhra Pradesh Solar Power Policy, 2015 - Orders - Issued.

ENERGY, INFRASTRUCTURE & INVESTMENT (PR.II) DEPARTMENT

#### G.O.MS.No. 8

Dated 12.02.2015 Read the following:-

1. G.O.Ms.No.39, Energy (Res) Deptt., dated 26.09.2012

2. G.O.Ms.No.44, Energy (Res) Deptt., dated 16.11.2012.

 From the VC&MD, NREDCAP, Hyderabad Lr.No.NREDCAP / Solar Policy – 2014/2013-14, dated 25.09.2014.

#### ORDER:

In order to promote Solar Power Projects, the Government of Andhra Pradesh have issued orders formulating Andhra Pradesh Solar Power Policy, 2012 vide references 1<sup>st</sup> and 2<sup>nd</sup> read above. Under the policy, 34.85 MW capacity solar power projects were only commissioned before 30<sup>th</sup> June, 2014 though it was envisaged to add 2000 MW capacity by the Group of Ministers constituted for the purpose of promotion of Renewable Energy. This policy is applicable up to the year 2017 and the incentives were applicable only for the projects commissioned up to 30<sup>th</sup> June, 2014. Further, due to bifurcation of the State, it is felt necessary to come out with a new comprehensive policy for promotion of solar power to meet the demand for power in an environmentally sustainable manner.

2. Government, after detailed discussions on the proposal vide reference 3<sup>rd</sup> cited, with various stake holders viz., APTRANSCO, APDISCOMS, NREDCAP Solar Power Developers & Solar Manufacturers Association hereby issue the Andhra Pradesh Power Policy, 2015 as mentioned below:

#### **ANDHRA PRADESH SOLAR POWER POLICY - 2015**

#### **PREAMBLE**

India is blessed with abundant sunshine and solar power is expected to play a critical role in meeting the energy needs of the country in the long run. Solar power projects can be setup in a much shorter timeframe when compared to conventional power projects and the cost of solar power has become more economical today. Solar power can also help meet energy requirements for both grid connected as well as off-grid applications such as solar powered agricultural pumpsets.

Andhra Pradesh is poised for rapid industrial growth driven by infrastructure investments and has also been selected by Ministry of Power as one of the pilot states for implementation of the 24X7 – Power for All (PFA) scheme. Solar energy can become an important source in meeting the growing power requirements of the State.

AP has large agriculture consumption constituting around 24% of the total energy consumption of the State. Solar power can also help shift the agriculture load and meet the power demand during the day time.

The State government is keen to tap the immense solar potential and promote this clean source of energy to meet the rising energy requirements of the State. The following factors make Andhra Pradesh an ideal location for setting up Solar Power Projects:

- Availability of about 300 sunny days in a year with solar insolation of more than 5 kWh/m²/day.
- Amongst the best performing power distributing companies in India (APEPDCL and APSPDCL).
- An efficient and strong evacuation infrastructure that can facilitate distributed generation.

The Government of Andhra Pradesh had earlier issued the "Andhra Pradesh Solar Power Policy — 2012" vide G.O.Ms.No.39 dated 26.09.2012 and G.O.Ms. No.44 dated 16.11.2012 to promote solar power generation in the State. Accordingly, the incentives under the Solar Policy were available for Solar Power Projects commissioned before 30.06.2014.

To meet the twin objectives of energy security and clean energy considerations, the GoAP has felt it necessary to come out with a new policy for solar power. The policy aims to promote widespread usage of solar power and to meet the following objectives.

#### **OBJECTIVES:**

- 1 To target a minimum total solar power capacity addition of 5,000 MW in the next five years in the State with a view to meet the growing demand for power in an environmentally sustainable manner.
- 2 To develop solar park(s) with the necessary utility infrastructure facilities to encourage developers to set up solar power projects in the State.
- 3 To promote distributed generation that can help in avoiding upstream network cost and contribute towards loss reduction.
- 4 To deploy solar powered agricultural pumpsets and meet power requirements of farmers during day time.
- 5 To promote local manufacturing facilities which will Generate employment in the State.

#### 1. Operative Period

This policy shall come into operation with effect from the date of issuance and shall remain applicable for a period of five (5) years and/ or shall remain in force till such time a new policy is issued.

Solar Power Projects (SPP) that are commissioned during the operative period shall be eligible for the incentives declared under this policy, for a period of ten (10) years from the date of commissioning - unless otherwise the period is specifically mentioned for any incentive.

#### 2. Eligible Developers

All registered companies, Government entities, partnership companies/ firms, individuals and all consumers of APDiscom(s) will be eligible for setting up of Solar Power Projects within the State for sale of electricity/captive use, in accordance with the Electricity Act-2003, as amended from time to time. The entity desiring to set up Solar Power Project shall intimate the Nodal Agency as per the para (5) of this policy.

#### 3. Solar Power Projects

#### A. Sale of power to AP Discom(s)

The government will promote setting up of Solar Power Projects for sale of power to APDiscoms. It is envisaged that the Discoms would procure around 2,000 MW of solar power capacity in a phased manner within the next five (5) years. The Discoms would enter into long term PPA of 25 years with developers who are selected based on a competitive procurement process.

#### B. Third party sale / Captive use

The government will encourage solar power producers to set up Solar Power Projects for captive use within the State or third party sale within and outside the State of Andhra Pradesh. These projects will also qualify for Renewable Energy Certificates (RECs) subject to applicable regulations/ guidelines issued by the appropriate commission.

#### C. Solar Parks

The Govt. of A.P will develop Solar Parks with capacity additions of around 2,500 MW in the next five (5) years to promote Solar Power Projects development in clusters of 500-1000 hectares. The State Government, under this policy, will help facilitate in building up the necessary infrastructure like power evacuation, water requirements and internal roads.

Solar Park shall consist of various zones viz. Solar Power Projects, Manufacturing Zones, R & D and Training Centres. The State will extend all facilities and fiscal incentives provided by Central Government/ National Solar Mission to the manufacturers in Solar Parks.

Special Purpose Vehicle(s) (SPV's) will be established for development of infrastructure and management of Solar Park. The SPV will formulate Policy and Rules in respect of land allotment, sharing of development cost by the solar power producers and manufacturers. The SPV will develop the initial infrastructure from the funds allocated by Gol and GoAP, which will be subsequently recovered from the solar power producers whose projects are located in Solar Parks by levying development charges.

#### D. Solar Rooftop Projects - Gross/Net Metering

The Government will promote solar rooftop systems on public buildings, domestic, commercial and industrial establishments on gross and or net meter basis. The consumer(s) are free to choose either net or gross meter option for sale of power to Discom under this policy. The applicable tariff for either of the cases shall be equal to the average cost to serve of the Discom which will be determined by APERC every year. For example, the average cost to serve approved by APERC for FY 2013-14 is Rs 5.25 per unit. This facility shall be extended for a period of 25 years for Eligible Developers who set up solar rooftop projects within the Operating Period of this policy.

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The metering facility will be extended for all Eligible Developers who intend to set-up solar photovoltaic plants at their premises. Eligible Developers who wish to avail the metering facility will have to apply through online mode to the Discoms — either on their websites and/or through designated mee seva / customer service centres. All approvals/clearances shall be disposed by the respective Discom within 14 days from the date of application

The projects of capacity upto 1000 KWp at a single location will be permitted.

Permission will be given to the group of persons/societies to set up Solar Power Projects and will be treated as collective generation for supply of power to the households of each society /group member. The DISCOMs will deduct the above energy from the consumed energy of individual service connections and balances (either excess or lower) can be billed on net metering basis. No Distribution losses and charges will be collected from the Group/Society/individuals by the DISCOMs.

Eligible Developers are allowed to avail the relevant subsidies and incentives from MNRE under JNNSM scheme. The eligible subsidy for net metering systems may be processed through NREDCAP (Nodal agency) or Channel Partners of MNRE, GOI. The sanction and release of the subsidy will be as per the guidelines issued by MNRE from time to time.

The modalities for implementing the rooftop policy including metering, billing, settlement, payment(s) and technical aspects etc. shall be issued by APEPDCL within 30 days from the date of issue of this policy, which would be followed by all DISCOMS in the State.

#### E. Solar pumpsets

The State government in collaboration with the Central Govt/MNRE/MOP/Multilateral agencies will undertake measures to enable gradual replacement of conventional pumpsets to solar powered pumpsets through subsidy support. Nodal agency will facilitate with government agencies for availing subsidies, grants and/ or incentives on behalf of APDiscoms.

It is envisaged that 50,000 solar powered pumpsets will be operational in the State in the next five years without any additional financial burden on the farmers. The modalities of the scheme will be developed in consultation with all the stakeholders within 30 days from the date of issue of this policy.

# 4. Incentives from the State Government

To enable solar power capacity addition in the State, following incentives shall be provided for Eligible Developers for those projects setting-up during the operative period mentioned in the para one (1).

# a) Transmission and Distribution charges for wheeling of power

Transmission and Distribution charges shall be exempted for wheeling of power generated from Solar Power Projects for only captive use/third party sale within the State.

# b) Distribution Losses

Distribution losses shall be exempted only for Solar Power Projects injecting at 33 kV or below irrespective of voltage-level of the delivery point within the Discom.

Contd... 5

#### c) Energy Banking

Banking of 100% of energy shall be permitted for all Captive and Open Access/ Scheduled Consumers during all 12 months of the year. Banking charges shall be adjusted in kind @ 2% of the energy delivered at the point of drawal. The banking year shall be from April to March.

Drawals from banked energy shall not be permitted during five (5) month period from 1<sup>st</sup> April to 30<sup>th</sup> June and 1<sup>st</sup> February to 31<sup>st</sup> March of each financial year. In addition, drawls of banked energy during the Time of the Day (ToD) applicable during the peak hours, as specified in the respective Retail Supply Tariff Order, shall also not be permitted throughout the year. However, the provisions on banking pertaining to drawal restrictions shall be reviewed based on the power supply position in the State.

Energy injected into the grid from date of synchronization to Commercial Operation Date (COD) will be considered as deemed energy banking.

The unutilized banked energy shall be considered as deemed purchase by Discom(s) at the pooled power purchase cost as determined by the APERC for the applicable year. Energy settlement shall be done on monthly basis.

#### d) Open Access

Intra-state Open Access clearance for the whole tenure of the project or 25 years whichever is earlier will be granted as per the APERC Regulations amended from time to time. In absence of any response or intimation from the Nodal Agency to the generator within 21 days, then such application shall be considered to be deemed open access.

#### e) Electricity Duty

Electricity duty shall be exempted for captive consumption, sale to Discom(s) and third party sale provided the source of power is from Solar Power Projects setup within the State.

#### f) Cross Subsidy Surcharge

Cross subsidy surcharge shall be exempted for third party sale provided the source of power is from Solar Power Projects setup within the State for a period of five (5) years from the date of commissioning of the SPP.

#### g) Contract Demand

Scheduled Consumers shall avail reduction in Contract Demand for a period of five (5) years from the date of commissioning of the project. Scheduled consumers shall have the same meaning as defined in Balancing and Settlement Code regulations issued by APERC and amended from time to time. The demand credit shall be computed based on the average solar power consumption during hourly time block period(s). An illustration is shown below:

- Solar power consumption in a month (kVAh) = 1000
- Hourly time-blocks in a month (hours) = 24X30 = 720
- Applicable demand credit = 1000/720 = 1.38 (kW)

Contd . 6 .

#### h) Renewable Energy Certificate (REC)

All projects developed with the above incentives will be eligible for REC benefits subject to applicable regulations/orders of the appropriate commission. Deemed injection into the grid for in-house/co-located solar generation will also be eligible for REC benefits subject to applicable guidelines.

#### i) Grid Connectivity and Evacuation facility

The power generated from a Solar Power Project shall be injected at an appropriate voltage at the sub-station and/or interconnection point of the APTransco / Discom(s). The Eligible Developer shall bear the entire cost of construction of power evacuation facilities from the project upto the interconnection point and/or upto APTransco / Discom(s) substation.

The Eligible Developer shall abide by the orders, rules, regulations and terms and conditions as approved by the Commission from time to time for operation of Solar Power Projects, power evacuation, transmission and wheeling of energy. Solar Power Projects will be exempted from paying the Supervision charges to APTransco/Discom(s) towards the internal evacuation infrastructure within the project site and upto interconnection point.

APTransco /Discom(s) will dispose the proposals for the technical feasibility for evacuation within 14 days from the date of receipt of application. Any upstream system strengthening requirement shall be borne by APTransco/ Discom(s) on a priority basis.

## j) Deemed Industry Status

Generation of electricity from Solar Power Projects shall be treated as eligible industry under the schemes administered by the Industries Department and incentives available to industrial units under such schemes shall be available to the solar power producers.

# k) Deemed Public Private Partnership (PPP) Status

Deemed PPP status shall be provided for projects coming up under category (A) as per para (3) of this policy.

# I) Non Agriculture Status

Deemed Non-Agricultural (NA) status for the land where Solar Power Projects will be accorded, on payment of applicable statutory fees.

#### m) Must run status

Injection from Solar Power Projects shall be considered to be deemed scheduled.

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#### n) Land

It is the responsibility of the project developer to acquire the land required for the project. However, in case of land owned by Revenue Department, the land allotment shall be done as per the prevailing government policy.

#### o) Pollution Clearance

Solar PV power projects will be exempted from obtaining any NOC/Consent for establishment under pollution control laws from AP Pollution Control Board.

#### 5. Nodal Agency

New and Renewable Energy Development Corporation of A.P. Ltd (NREDCAP) shall act as a Nodal Agency under this policy and as decided by the government from time to time.

The Nodal Agency and/or designated offices by the Nodal Agency shall be responsible for the following activities:

- a) Facilitate in obtaining revenue land wherever is required.
- b) Facilitate in getting power evacuation and/ or Open Access as per the regulation issued by APERC and amended from time to time.
- c) Facilitate water allocation from concerned departments.
- d) Facilitate and process of proposals for availing subsidy for solar rooftop systems as per MNRE guidelines.
- e) Co-ordinate with MNRE/SECI/APTransco/Discom(s) and any other Central/State agencies in obtaining necessary clearances, approvals, grants and subsidies.

An online system will be established by the Nodal Agency for acceptance of applications and for providing status updates. The developers will be given a login access for tracking the status updates. All approvals/clearances shall be disposed within 30 days from the date of registration.

The modalities for operating the single window clearance mechanism shall be developed within 30 days from the date of issue of this policy.

#### 6. Administrative approval

The applications received from the Eligible Developers as per the provisions of this policy should be in the prescribed format along with a registration fee of Rs.1000 for capacities upto 5 KWp; Rs. 5,000 for capacities above 5 KWp to 100 KWp; Rs,10,000 for capacities above 100 KWp to 1000KWp and Rs.10,000 per MW for capacities more than 1000 KWp.

In addition, a facilitation fees of Rs 25 per kW shall be applicable for the Eligible Developer who seeks assistance from the Nodal Agency for obtaining single window clearance support as per the above para.

# 7 Migration of Solar projects registered under A.P. Solar Power Policy 2012

A onetime opportunity will be extended to all Solar Power Project Developers other than those who have already signed PPAs and registered under AP Solar Power Policy 2012 and not commissioned before 30<sup>th</sup> June, 2014 to migrate to the new Policy. Such developers shall register with the nodal agency within two months from the date of notification of the new policy.

#### 8 Project Monitoring Committee

A "High Level Committee" constituted with the following members will monitor the progress of implementation of the Solar Power Projects cleared under the policy:

- 1. Secretary, Energy Department
- 2. Chairman and Managing Director, APTransco
- 3. CMD of APDiscom(s)
- 4. VC & MD, NREDCAP( Member-Convener)
- 5. Representative of FAPCCI/CII
- 6. Representatives (2) of solar power developers

If any difficulty arises in giving effect to this policy, the High Level Committee is authorized to issue clarification as well as interpretation to such provisions, as may appear to be necessary for removing the difficultly either on its own motion or after hearing those parties who have represented.

#### 9 Solar Manufacturing

The government intends to promote solar manufacturing facility that can help develop the solar eco-system and support job creation potential in the State. The following incentives shall be applicable for new manufacturing facilities and equipment's, ancillaries related to Solar Power Projects only.

- Priority allotment of government land in solar parks on long term lease basis
- Exemption from electricity duty for a period of ten (10) years

#### 10 Mid-Term Review

State Govt. may undertake a mid-term review of this policy after a period of two years or as and when need arises in view of any technological breakthrough or to remove any inconsistency with Electricity Act 2003, rules and regulations made there under or any Govt. of India policy.

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### 11 Power to remove difficulties

If any difficulty arises in giving effect to this policy, energy department is authorized to issue clarification as well as interpretation to such provisions, as may appear to be necessary for removing the difficulty either on its own motion or after hearing those parties who have represented for change in any provision.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

#### AJAY JAIN SECRETARY TO GOVERNMENT

To

The Vice Chairman & Managing Director, NREDCAP, Hyderabad.

The Chairman & Managing Director, APTRANSCO, Hyderabad.

The Managing Director, APGENCO, Hyderabad.

The Secretary, APERC.

The CMDs, of APSPDCL/ APEPDCL.

All Collectors & District Magistrates.

The Principal Secretary to Government, EFS&T Dept.,

The Principal Secretary to Government, Revenue Dept.,

The Principal Secretary to Govt., Finance Dept.,

#### Copy to:

The Secretary to Hon'ble C.M.

The P.S. to Hon'ble Dy. Chief Minister for Revenue, Stamps & Registrations.

The P.S. to Hon'ble Minister for Finance, Planning, Commercial Taxes & Legislature Affairs.

The P.S. to Secretary, Energy, I&I

SF/SC.

// Forwarded By Order //

**SECTION OFFICER** 

## GOVERNMENT OF ANDHRA PRADESH ABSTRACT

ENERGY, INFRASTRUCTURE & INVESTMENT DEPARTMENT - Development of Wind Power in Andhra Pradesh - Andhra Pradesh Wind Power Policy, 2015 - Orders - Issued.

# ENERGY, INFRASTRUCTURE & INVESTMENT (PR.II) DEPARTMENT G.O.MS.No. 9 Dated:13.02.2015

Read the following:

1. G.O.Ms.No.48, Energy (Res) Deptt., dated 11.04.2008.

2. G.O.Ms.No.99, Energy (Res) Deptt., dated 09.08.2008.

 From the VC&MD, NREDCAP, Hyderabad Lr.No.NREDCAP / WE/Govt./2014, dated 25.09.2014.

#### **ORDER:**

In order to promote Wind Power Projects, the Government of Andhra Pradesh have issued orders formulating Andhra Pradesh Wind Power Policy, 2012 vide references 1<sup>st</sup> and 2<sup>nd</sup> read above. The operative period of policy was 5 years and it expired in April, 2013, Considering, the good wind power potential existing in the State and to achieve 4000 MW capacity addition through wind power during the next 5 years period, there is a need to bring out comprehensive wind power policy.

2. Government, after detailed discussions on the proposal vide reference 3<sup>rd</sup> cited with various stakeholders viz., APTRANSCO., APDISCOMS, NREDCAP Wind Power Developers and Associations etc., hereby issue the Wind Power Policy, 2015 as mentioned below:

#### **PREAMBLE**

India is amongst the largest wind power markets in the world. Wind power is already economical in comparison to conventional power sources and Andhra Pradesh has a huge wind power potential that is yet to be harnessed. The wind power potential in the combined state of Andhra Pradesh as estimated by the National Institute of Wind Energy (NIWE), formerly known as Centre for Wind Energy Technology (C-WET) is around14,497 MW at 80 m level with maximum potential existing in the districts of Ananthapur, Kadapa, Kurnool, Chittoor and Nellore districts.

The Government of Andhra Pradesh has earlier issued "Wind Power Policy", vide G.O.Ms.No.48 dated 11.04.2008 and G.O.Ms.No.99 dated 09.09.2008, to promote wind power projects. Since the policy operative period was for five (5) years, the policy expired in April, 2013. Taking into consideration the rising power requirements of the State post bifurcation and clean energy considerations, the government of Andhra Pradesh is keen to promote wind power generation in a big way.

#### **OBJECTIVES:**

- To encourage, develop and promote wind power generation in the State with a view to meet the growing demand for power in an environmentally and economically sustainable manner.
- 2. To attract private investment to the State for the establishment of large wind power projects.
- 3. To promote investments for setting up manufacturing facilities in the State, which can generate gainful local employment.

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#### 1 Operative Period

The policy shall come into operation with effect from the date of issuance and shall remain applicable for a period of five (5) years and/ or shall remain in force till such time a new policy is issued.

Wind power projects that are commissioned during the operative period shall be eligible for the incentives declared under this policy, for a period of ten (10) years from the date of commissioning – unless the period is specifically mentioned for any incentive.

#### 2 Eligible Developers

All registered companies, Joint Venture Companies, Central and State power generation/ distribution companies and public / private sector wind power developers will be eligible for setting up of wind power projects, either for the purpose of captive/group captive use and/or for selling of electricity to the utilities or third parties, in accordance with the Electricity Act-2003, as amended from time to time.

The entity desiring to set up wind power project(s), either for sale of power and/ or for captive use/group captive use of power within or outside the State, shall inform the Nodal Agency as per the para (9) of this policy.

#### 3 Category of Wind Power Projects

| Category I   | Projects set up in government/revenue lands or forest areas or assigned lands and also in private lands selling power within the state. |
|--------------|---|
| Category II  | Projects set up for captive use or group captive use /3 <sup>rd</sup> party sale within or outside the state.                           |
| Category III | Sale of power at average power purchase cost and availing Renewable Energy Certificate (REC)  |

# Category I: Projects set up in government / revenue lands or forest areas or assigned lands and also in private lands selling power within the State

Power generated from the wind power projects installed entirely or partly on government/ revenue land or forest areas shall be for sale within the State only.

The Govt. of A.P. may consider proposals for allotment of revenue land if available - at the wind power potential areas on first come first serve basis- based on recommendation of NREDCAP, as per the provisions of New Land Allotment Policy announced by the Government vide G.O. Ms. No: 571, Dt: 14-09-2012 of Revenue (Assignment-I) Dept.

To facilitate faster execution of projects, the district collector shall handover advance possession of land including pathways to NREDCAP and the land shall be allotted in the joint name of NREDCAP and the Developer. The concerned district collector after taking into account all the necessary undertakings of land proposal shall permit the developer to start the construction. NREDCAP shall withdraw its rights from the land once the project gets commissioned.

In case of forest areas, the developers shall submit the application through the Nodal Agency to the forest department, to consider for allotment as per the guidelines/regulations laid down by the forest department from time to time.

If the wind farm is set up in private land then the Eligible Developer shall procure the land from the landholder on their own.

Category II: Captive use or group captive use /direct sale to 3rd party sale within the State/States other than A.P. State

The State will promote wind power producers to set up wind power projects with no cap on capacity for captive use/group captive or sale of power to 3<sup>rd</sup> party within the State/States other than Andhra Pradesh. These projects will also qualify for Renewable Energy Certificates (RECs) subject to applicable regulations/ guidelines issued by the appropriate commission.

# Category III: Projects under Renewable Energy Certificate Mechanism

The State will promote wind power producers to set up wind power projects with no cap on capacity for sale through Renewable Energy Certificate (REC) mechanism. The wind power producers will be required to apply for accreditation to the State Accreditation Agency and thereafter to Central Agency for registration and issuance of RE certificate under REC mechanism as per order/regulations of the appropriate commission. The power generated from these power projects shall be purchased by APDiscoms at pooled cost of power purchase as determined by APERC from time to time.

#### 4 Capacity Allotment

The wind power projects shall be allowed in the areas notified by MNRE or in the areas where wind monitoring studies have been undertaken by MNRE/NIWE/NREDCAP/GoAP. In case wind resource assessment studies are proposed to be undertaken by the private developers, the capacity allotment will be considered only on submission of the wind data validation report of NIWE. The area applied for development of wind farm shall be clearly marked on a toposheet and google Map with the proposed capacity to be developed in that area.

NREDCAP shall be responsible for capacity allotment for upto 40 MW and to recommend capacity allotment beyond 40 MW to Government of AP.

# 5 Wind Resource Assessment studies in Private Sector

Permission for carrying out Wind Resource Assessment (WRA)and subsequent development at self-identified locations by the private entities will be given by the Nodal Agency on a **first come first serve basis** and will be governed by MNRE circular no. 51/9/2007-WE dated 20.06.2008 for wind measurement & subsequent development by private sector.

The applicant needs to clearly demarcate the project boundaries in a topo-sheet (scale 1:50000) where it is proposed to conduct the WRA study. All applications received will be scrutinised to ensure that the site identified has not been allotted to any other entity for WRA study as on the application date or is not within 5km radius from NIWE/NREDCAP proven or on-going wind masts as on the application date. Such WRA studies shall be completed within 24 months from date of signing of MoU with NREDCAP.

After completion of wind monitoring exercise, the applicant will be provided an exclusive period of 180 days from the expiry date of MOU to get the data authenticated by NIWE and make an application for capacity allotment. If the project is not applied for capacity allotment, the permission granted for private WRA study shall be cancelled. The applicant is also required to provide an undertaking to NREDCAP, with a copy to NIWE, indicating that NIWE can share the data to NREDCAP for subsequent/additional capacity allotments in the proposed (or balance) area.

# 6 Solar and Wind Hybrid Power Projects

To enable better utilization of common infrastructure and related facilities, solar and wind hybrid power projects shall be encouraged in the State. The tariff for such solar projects shall be as determined by APERC.

#### 7 Repowering

The wind power developers will be encouraged to install higher capacity and improved technology Wind Electric Generators (WEGs) by undertaking appropriate micro-siting studies in order to optimally utilize the available wind resource potential at the project sites.

In respect of projects where lower capacity and lower hub height WEGs were installed and which have completed more than 15 years of life, proposals will be considered for replacing older turbines with higher capacity WEGs. In such cases, approval will be granted - subject to amendment of Power Purchase Agreement (PPA) with extension of time period for another 25 years.

The tariff payable for energy corresponding to the additional capacity available due to repowering of such projects shall be as per the applicable tariff determined by APERC from time to time.

#### 8 GoAP Incentives

To enable wind power capacity addition in the State, following incentives shall be provided for Eligible Developers for those projects setting during the operative period mentioned in the para one (1).

#### a) Power Evacuation

- i. The Eligible Developer shall bear the entire cost of power evacuation facilities for interconnecting the wind farm with the grid.
- ii. The Eligible Developer shall abide by the orders, rules, regulations and terms and conditions as approved by APERC from time to time for operation of wind farms, power evacuation, transmission and wheeling of energy.
- iii. Wind power projects will be exempted from paying the supervision charges to APTransco/Discom towards the internal evacuation infrastructure within the wind farm site and upto pooling sub-station. All electrical installations within wind farm site and upto pooling sub-station shall be as per the statutory requirements and shall be certified by the Chief Electrical Inspector General (CEIG) or any other statutory authority.
- iv. APTransco/Discom will dispose the proposals for the technical feasibility for evacuation within 14 days from the date of receipt of application. Any upstream system strengthening requirement shall be borne by APTransco/Discom on a priority basis.

# b) Transmission and Distribution charges for wheeling of power

There will be no Transmission and Distribution charges for wheeling of power generated from wind power projects, to the desired location/s for captive use/third party sale within the State through grid. However, the Transmission and Distribution charges for wheeling of power generated from the wind power projects for sale outside the State shall be as per regulations of APERC.

The  $3^{\rm rd}$  party sale by Eligible Developers under this policy will be permitted only to HT – I category consumers as categorized in Tariff Orders and as per the regulations issued by APERC from time to time.

#### c) Energy Banking

Banking of 100% of energy shall be permitted during all 12 months of the year. Banking charges shall be adjusted in kind @ 2% of the energy delivered at the point of drawal. The banking year shall be from April to March.

Drawals from banked energy shall not be permitted during five (5) month period from 1<sup>st</sup> April to 30<sup>th</sup> June and 1<sup>st</sup> February to 31<sup>st</sup> March of each financial year. In addition, drawls of banked energy during the Time of the Day (ToD) applicable during the peak hours, as specified in the respective Retail Supply Tariff Order, shall also not be permitted throughout the year. However, the provisions on banking pertaining to drawal restrictions shall be reviewed based on the power supply position in the State.

Energy injected into the grid from date of synchronization to Commercial Operation Date (COD) will be considered as deemed energy banking.

The unutilized banked energy shall be considered as deemed purchase by Discoms at the pooled power purchase cost as determined by the APERC for the applicable year. Energy settlement shall be done on monthly basis.

### d) Open Access

Intra-state Open Access clearance for the whole tenure of the project or 25 years whichever is earlier will be granted as per the APERC Regulations amended from time to time. In absence of any response or intimation from the Nodal Agency to the generator within 21 days, then such application shall be considered to be deemed open access.

# e) Electricity Duty

All wind power projects are exempted from paying Electricity Duty in case of sale of power to APDiscom.

# f) Deemed Public Private Partnership (PPP) Status

Deemed PPP status shall be provided for projects coming up under Category I and have entered into a PPA with APDiscom for sale of power.

# g) Non Agriculture Status

Deemed Non-Agricultural (NA) status for the land where wind power projects will be accorded, on payment of applicable statutory fees.

Contd., 6

#### h) Deemed Industry Status

Generation of electricity from wind power projects shall be treated as eligible industry under the schemes administered by the Industries Department and incentives available to industrial units under such schemes shall be available to the wind power producers.

#### i) Must run status

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

#### j) Pollution Clearance

Wind power projects will be exempted from obtaining any NOC/Consent for establishment under pollution control laws from AP Pollution Control Board.

#### 9 Nodal Agency

New and Renewable Energy Development Corporation of A.P. Ltd (NREDCAP) shall act as a Nodal Agency under this policy and as decided by the government from time to time.

The Nodal Agency and/or designated offices by the Nodal Agency shall be responsible for facilitating single window clearance of the projects for the following activities:

- a) Registration of projects
- b) Allotment of capacity of projects
- c) Processing of proposals for allotment of revenue land or Forest land.
- d) Arranging approval for power evacuation plan and open access.
- e) Arranging other statutory clearances/approvals if any.
- f) Co-ordination with MNRE/SECI/APTransco/APDiscoms and other central and state agencies.

An online system will be established by the Nodal Agency for acceptance of applications and for providing status updates. The developers will be given a login access for tracking the status updates. All approvals/clearances shall be disposed within 30 days from the date of registration.

# 10 Time Lines for Project Completion

The Eligible Developers should enter into a project agreement along with the applicable fees and bank guarantees with the Nodal Agency within two (2) months from the date of sanction of the capacity allotment.

In case of wind power projects allotted in revenue lands, the project shall be commissioned within 18 months from the date of possession of revenue lands and/ or issue of power evacuation clearance, whichever is later. In case of wind power projects allotted in private lands, the projects shall be commissioned within 18 months from the date of issue of power evacuation clearance.

In case of revenue and private lands, if there is no development at the site, even after three (3) years from the date of sanction, the site may be offered to any other developer by the Nodal Agency. The Nodal Agency would be at liberty to invite bids for setting up wind power projects in such sites, where no development is taken up within prescribed period. In such cases, the Government may resume the lands so allotted or acquire the land purchased by the developers at the same price at which the sale deeds were registered and offer the lands to other developers by inviting bids.

#### 11 Manufacturing

The Government intends to promote wind turbine manufacturing facilities that can contribute towards wind sector development in the State. The following incentives shall be applicable for new manufacturing facilities and equipment's, ancillaries related to wind power projects only.

- Priority allotment of Government land on long term lease basis
- Exemption from electricity duty for a period of ten (10) years for consumption of electricity from the first year of operation.

# 12 Applicability of this Policy for wind power projects approved under earlier Policy

This policy is applicable in respect of all wind power projects which are not commissioned as on date of notification of this policy in the State of Andhra Pradesh.

# 13 Project Monitoring

A "High Level Committee" constituted with the following members will monitor the progress of implementation of the Wind Power Policy:

- 1. Secretary, Energy Department
- 2. Chairman and Managing Director, APTRANSCO
- 3. CMD of APDISCOMs
- 4. V.C.& Managing Director, NREDCAP( Member-Convener)
- 5. Representative of Indian Wind Turbine Manufacturers
  Association (IWTMA)
- 6. Representative of Indian Wind Power Association (IWPA)

If any difficulty arises in giving effect to this policy, the High Level Committee is authorized to issue clarification as well as interpretation to such provisions, as may appear to be necessary for removing the difficultly either on its own motion or after hearing those parties who have represented.

#### 14 Mid-term Review

State Govt. may undertake a Mid-term Review of this policy after a period of two years or as and when need arises in view of any technological breakthrough or to remove any inconsistency with Electricity Act 2003, rules and regulations made there under or any Govt. of India policy.

Contd., 8.,

# 15 Power to remove difficulties

If any difficulty arises in giving effect to this policy, energy department is authorized to issue clarification as well as interpretation to such provisions, as may appear to be necessary for removing the difficulty either on its own motion or after hearing those parties who have represented for change in any provision.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

AJAY JAIN SECRETARY TO GOVERNMENT

To

The Vice Chairman & Managing Director, NREDCAP, Hyderabad.

The Chairman & Managing Director, APTRANSCO, Hyderabad

The Managing Director, APGENCO, Hyderabad.

The Secretary, APERC, Hyderabad

The CMDs, of APSPDCL, Tirupathi / APEPDCL, Visakhapatnam.

All Collectors & District Magistrates in the state.

The Principal Secretary to Government, EFS&T Department.

The Principal Secretary to Government, Revenue Department.

The Principal Secretary to Govt., Finance (PF.I) Department.

Copy to:

The Secretary to Hon'ble C.M.

The P.S. to Hon'ble Dy. Chief Minister, Revenue, Stamps & Registrations.

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