## GOVERNMENT OF ANDHRA PRADESH <u>ABSTRACT</u> Clean and Green Energy – Development of Wind Power in Andhra Pradesh – New Wind Power Policy – Orders Issued. ENERGY (RES) DEPARTMENT

G.O. Ms. No.48 ORDER:

#### Date: 11.04.2008

Fast depiction of fossil fuels, increasing .demand for electricity, increase in green house emissions and global warming have necessitated promotion of generation of energy through Non-conventional energy (NCE) and renewable sources. Amongst NCE sources, Wind IS an important source of energy.

2. As per the survey of the Centre for Wind Energy Technology (C-WET), Ministry of New and Renewable Energy, Government of India, Andhra Pradesh has a potential of about 2100 MW of Wind Energy, of which 107 MW has been harnessed and for another 346 MW, projects are under implementation. Government of Andhra Pradesh have been promoting Wind Energy with private participation. Non-Conventional Energy Development Corporation of Andhra Pradesh Ltd., (NEDCAP) has been designated as Nodal Agency to approve projects upto 20 MW capacity. Government is allotting Government land to the private developers for setting up of wind farms. Keeping in view the commitment of the Government to promote non-polluting sources of energy and to accelerate harnessing the wind potential of the State, Government hereby introduce the new policy for DEVELOPMENT OF WIND POWER IN ANDHRA PRADESH. The policy comprehensively rovers the following:

- i) Tariff determination
- ii) Allotment of Potential Sites
- iii) Wheeling Charges and allied issues

3. The objective of this policy is to encourage optimum utilization of the available wind power potential in the State by facilitating adoption of Slate of art technology through private participation, balancing the interest of the customer a and the developers.

## 4) **Operative Period:**

This policy shall come into operation from the date of issue of this order and will be applicable to Wind Power Plants coming up henceforth and for a period of 10 years from the date of this policy, unless / superseded or modified by any other order.

This Policy supersedes all previous Government Orders issued related to the wind power except the Government orders which are specifically mentioned in this Policy Alter this policy comes into effect all new approvals, PPAs, Wheeling Agreements etc., will be granted/executed only under this Policy. However, the existing Power Purchase Agreements and Wheeling Agreements shall continue to be

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applicable to existing Wind Power Projects and they shall abide by the terms and conditions mentioned therein.

## 5) Eligible Developers:

Wind Farm developers, Wind Energy Generator manufacturers, Government owned companies, Private Companies, Joint Venture Companies and Private Inventors would be eligible developers under this policy.

## 6) Eligible Wind Farm:

Wind Farms of an Eligible Developers would be eligible, if it satisfies the following conditions:

- i) The WEGs installed should be new and match the specifications issued by C-WET from time to time.
- ii) Minimum turbine capacity of WEGs proposed for installation would not be less than 225 KW.
- iii) Eligible Developers shall enter into all applicable agreements as per the guidelines issued by the Andhra Pradesh Electricity Regulatory Commission from time to time,

## 7) **Definition:**

Following expressions would have meanings assigned to them as follows unless the context otherwise requires:

- i) "COD" means 'Commercial Operation Date'
- ii) "Commission" means 'Andhra Pradesh Electricity Regulatory Commission.'
- iii) "C-WET" means 'Center for Wind Energy Technology'
- iv) "Developer or Eligible Developer" means an entity which develops Wind Farms and as detailed in clause 'Eligible Developers n' of this policy
- v) "Eligible Wind Farm" means a Wind Farm as detailed in Eligible Wind Farm clause of this policy
- vi) "Investor" means a body interested in investing in a Wind Farm
- vii) "DISCOM/DISCOMs" means respective electricity distribution companies of Andhra Pradesh (APCPDCL, APSPDCL, APEPDCL, APNPDCL).
- viii) "Manufacturer" means manufacturer of WEGs(Wind Energy Generator)
- ix) "Billing Month" means the period between two successive meter-reading dates, as provided in PPA or Wheeling Agreement.

- x) "NEDCAP" means Non-Conventional Energy Development Corporation of Andhra Pradesh.
- xi) "State" and "Government" means, the State of Andhra Pradesh and the Government of Andhra Pradesh., respectively

xii) "Wind Energy Generator (WEG)" means a machine/device, which converts kinetic energy of wind into electrical energy with proven technology.

xiii) "Wind Farm" means cluster of WEGs erected by a single developer and generating electricity from wind.

## Tariff for purchase of energy & allotment of Government lands:

The DISCOMs arc permitted to offer Rs.3.10 (Three Rupees & Ten paise only) per unit (KWH) to the Power being generated from wind Power projects for a period of 10 years so as to enable the DISCOMS to enter Power purchase agreements subject to obtaining the consent of the APERC. (Orders in this regard were already issued vide Lr. No 6246/RES/2007-4 Dt 27-10-2007) In cane any eligible developer- offers less than this tariff (Rs.3.10 Ps.), such developer will be given preference in allotment of Government land.

The order issued in G.O.Ms. No. 19 dated 16.03.1996 of Energy (RES) Dept., detailing the procedure for allotment of Government land to private developers at market value will continue subject to condition that the land is not used for any other purpose other than setting up of Wind Farm. To facilitate quicker execution of the project, the Government has issued Memo No.71022/Asn.1(1)/97-I dated 4.11.1997 of Special CS to Govt. and Chief Commissioner of land administration and also vide memo No.2742/Asn. 1(1)/2005-1 dt3.8.2005 of Special CS Revenue (ASN. 1) Dept., has authorized respective District Collector to handover the land in advance possession to the power developers subject to the following conditions.

- i) The developer should deposit the cost of land as fixed by the Collector.
- ii) They should give an undertaking to the satisfaction of the Collector that the developer would pay enhanced cost in case; it is revised at a later date at the time of issuing alienation orders. This existing procedure will be continued.

Each Eligible Developer may be allocated available government land to harness up to a maximum of 200 MW of wind power initially. After commissioning of 100 MW capacity Wind farms in the 1<sup>st</sup> stage in the allocated government land, the Government may lease land for another 100 MW capacity Wind farms. This is to ensure that there is no preemptive occupation of government lands by any developer or WEG manufacturer with a view to monopolize potential sites.

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- 8.4 In case of Wind Power projects being set up for own/captive use or 3<sup>rd</sup> party sale, Government land may be made available on higher priority.
- 8.5 If the Wind farm is set up in Private land then the Eligible Developer shall procure the land from the Landholder on their own.

## 9) Use of power produced:

Developers would be eligible for using the power produced for captive consumption or making sale to a third party or to DISCOMs. A PPA will be required to be entered into with concerned DISCOM as per the power purchase guidelines and Wheeling Agreements will be required to be entered into with AP TRANSCO or/and DISCOM (s) as per Open Access regulations, and any other relevant guidelines issued by the Regulatory Commission from time to time.

## **10) Duration of PPAs or Wheeling Agreements:**

The PPAs may be for 20 years as per the present norms. The Wheeling Agreement may be as per the Open Access Regulations approved by the Commission from time to time.

## **11) Power evacuation facilities:**

- **11.1** The Eligible Developer shall bear the entire cost of power evacuation facilities for interconnecting the Wind farms with the Grid and delivery of power.
- 11.2 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 Wind farms, power evacuation, transmission and wheeling of energy.

# 12) Wheeling and Banking:

- 12.1 In case of transfer of power by the Developer for its own captive use or 3<sup>rd</sup> party sale, it shall be governed by the Open Access regulations issued by the Commission from time to time. The balancing and settlement of energy and demand would be as per the Balancing and Settlement code as approved by the Commission from lime to time.
- 12.2 The 3<sup>rd</sup> party sale by eligible developers under (his policy will be permitted only to HT I category consumers as categorized in Tariff Orders issued by the Commission from time to time.

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- 12.3 The Eligible Developers may be given concessional wheeling and transmission charges, as there will be no emission of Greenhouse gases from the Wind farms. This will be subject to approval of APERC. The concessional wheeling and transmission charges for captive use or 3<sup>rd</sup> party sale may be in kind at 5% of energy delivered into the grid (which includes transmission and distribution losses).
- 12.4 Banking of energy generated by the Eligible Developer will not be allowed. The energy generated, if not consumed during the Billing month, would be treated to have been sold to respective DISCOM. DISCOM may pay for such unconsumed/unutilized energy at the following tariff:

75% of Rs.3.10 per unit or 75% of the lowest tariff resulting from the bidding process under this policy, whichever is lower. This will be subject to approval by the Andhra Pradesh Electricity Regulatory Commission.

12.5 For Captive consumers or 3<sup>rd</sup> party consumers from wind power projects, the minimum billing demand shall be 60% of Contracted Maximum Demand during June to September. Any changes in the contracted demand would be made as per the provisions of the General Terms and Conditions of supply (GTCS).

### **13)** Sharing of Carbon credits:

The Eligible Developers who opt for sale of energy to DISCOMs shall share carbon credits with DISCOMs. The developer is eligible for carbon credits under the Clean Development Mechanism (CDM). They may be allowed to retain 90% CDM benefit and pass on 10% benefit to the Distribution Company. However, this is subject to the orders of the Commission from time to time in this regard.

### **14)** Facilitation by NEDCAP:

NEDCAP may facilitate required clearances for the project at the Stale and Central Government levels and grant of loans by IREDA/PFC/REC and other term loan Agencies/Commercial Banks as required by the Developer and regulate the allotment of wind generation power projects.

### (BY ORDER AND IN THE NAME OF THE .GOVERNOR OK ANDHRA PRADEHH)

# A.K. GOYAL

### SPL. CHIEF SECRETARY TO GOVERNMENT

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The VC & MD NEDCAP, Hyderabad. The Chairman & Managing Director, APTRANSCO. The Secretary, APERC. All CMD of DISCOMs. All Collectors & District Magistrates. The Special CS to Govt, and Chief Commissioner of band Administration, Govt, of AP. The Special CS EFS&T Dept., Govt, of AP. Special CS Revenue Dept., Govt, of AP. Copy to The Principal Secretary to Hon'ble CM. The P.S to Hon'ble Minister for Energy. The P.S to Spl C.S. to Government, Energy. Sri V. Sai Baba, Head SBU (South) M/s Suzlon Energy Ltd. No. 1B, 1<sup>st</sup> Floor, Uma Enclave, Adj. Hank of India, Road No. 9, Via Water Tank Road, Lane Opp. To Taj Krishna, Banjara Hills, Hyderabad -500 034, India, w.r.t., letter dt.09.06.2006 SC/SF (C.No.4844).

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Sd/ SECTION OFFICER

# GOVERNMENT OF ANDHRA PRADESH <u>ABSTRACT</u>

Clean and Green Energy – Development of Wind Power in Andhra Pradesh – New Wind Power Policy – Amendment- Orders Issued.

#### DEPARTMENT

#### G.O. Ms. No.99

#### Date:09.09.2008 Read the following

1. G.O.Ms No. 48 Energy (RES) Department, Dated. 11-04-2008.

2. Representation from IWTMA Chennai Dt:12-05-2008.

3. From APTRANSCO Lr.No.CE/IPC/121/F.Wind-Policy/ D.No 111/08,Dated. 31-07-2008.

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# <u>ORDER</u>

In the reference first read above, Government have issued the New Wind Power Policy for the development of clean and green energy in the State.

**2.** In the reference second read above the Association for Indian Wind Turbine Manufacturers Association (IWTMA) have requested the Government for certain amendments to the New Wind Power Policy for smooth implementation and to encourage the wind energy development in the state.

**3.** In the reference third read above the APPCC/ APTRANSCO have stated that on the request of IWTMA they have constituted a committee consisting of Joint Managing Director (HRD,coml.,IPC)/APTRANSCO as Chairman and CMDs of APCPDCL & APNPDCL, VC & MD NEDCAP, other concerned Officers and representatives of the IWTMA as members. The said committee after detailed discussions have submitted certain proposals for amendment to the New Wind Power Policy issued in G.O.Ms.No.48, Energy (RES) Dt:11-04-2008 and the APPCC/APTRANSCO have submitted the same to the Government for consideration.

**4.** Government after careful examination of the proposals made by the Committee constituted by the APPCC/APTRANSCO here by issue the following amendments to the G.O.Ms.No.48, Dt.11-04-2008 of Energy (RES) Department.

## AMENDMENT

I) For the figures '10' years occurred in para 4 captioned Operative period the figures '5' years shall be substituted.

II) The entire clause 1 under para '8' captioned "Tariff for purchase of Energy & allotment of Government lands" shall be substituted with the following:-

8.1 "The tariff for the upcoming Wind Power Projects set up under the policy shall be firm at Rs.3.50 per unit and it will be applicable for a period of 10 years from Commercial operation Date (COD), subject to approval of the APERC.

8.1(a) The tariff for the period  $11^{th}$  year to  $20^{th}$  year shall be as fixed by APERC.

8.1(b) The DISCOMS shall have the first right of refusal on Power Purchase if the Plant continues to operate after the  $20^{th}$  year of operation from COD. The tariff beyond  $20^{th}$  year shall be as mutually agreed by both the parties.

III) The words and figures shown against Clause '4' under para '12' Captioned "Wheeling and Banking" shall be substituted with the following:

"The Wind Power Projects are not eligible for Banking of Energy. The Energy generated by captive generating Plants, if not consumed during the billing month, would be deemed to have been sold to respective DISCOM and the DISCOM may pay for such un-utilized Energy at the rate of 85% of the tariff as amended".

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

#### A.K. GOYAL SPECIAL CHIEF SECRETARY TO GOVERNMENT

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The Vice Chairman and Managing Director, NEDCAP, Hyderabad. The Chairman & Managing Director, APTRANSCO. The Secretary, APERC. All CMD of DISCOMs. All Collectors & District Magistrates. The Special CS to Government and Chief Commissioner of Land Administration, Government of Andhra Pradesh. The Special CS EFS&T Dept., Govt. of AP. Principal Secretary to Revenue Department to Govt. A.P. Copy to: The Principal Secretary to Hon'ble C.M. The P.S to Hon'ble Minister for Energy. The P.S to Spl C.S. to Government, Energy The Chairman, IWTMA, Suit No.A2, OPG Towers, 74 (Old No.133), Santhome High Road, Chennai:600 004. SF/SC

//FORWARDED:: BY ORDER//

SECTION OFFICER