

To,  
The Secretary,  
APERC,  
4<sup>th</sup> & 5<sup>th</sup> Floors, Singareni Bhavan,  
Red Hills,  
Hyderabad – 500 004

Date: 23-12-2008

Dear Sir;

Sub:- Comments/suggestions on RPPO to be issued.  
Ref:- Public Notice dated 24-11-2008.

The following are our comments/suggestions on the Discussion Paper on Issuance of Renewable Power Purchase Obligation (RPPO) Order.

**1.1** We request the Commission to allow us to be heard in person before the Commission takes a decision on this issue.

**1.2** The RPPO order shall be reviewed once in 5 years.

**1.3** The RPPO shall be issued as an Order not as a Regulation.

**2.1** We suggest to retain the present 5% norm for purchase from NCE units. With rapid increase in total quantum of power supply and consumption in the state it may be difficult to achieve the 5% in the coming years. This share shall be taken as a target to be achieved and at the same time problems involved in achieving it shall be taken in to account. This exercise shall be considered as a promotional drive rather than as a drive to penalize those who could not make it.

**2.2** To achieve this NCE power is to be procured from within the state.

**2.3** Given the fact that the regions covering the 4 DISCOMs in the state have different natural endowments the choice of sources from which they can obtain NCE need to be left to the individual DISCOMs.

**2.4** If the power generators with whom DISCOMs have entered in to PPAs for supply of NCE fail to supply the same in agreed quantity the DISCOM cannot be faulted. Hence it needs waiver from this requirement. If the said PPA did not have any penalty clause to penalize the generators the Commission shall include such a provision. This is more so because many of the NCE units availed themselves of capital subsidy, and they cannot plead any inability except limits imposed by the nature.

**2.5** All the electricity consumers in the state shall bear the responsibility and cost towards promotion of NCE units. This burden cannot be imposed on the consumers who are connected to the grid only. Even the open access consumers and those having captive

power plants (CPP) shall also share this responsibility. CPP based on non-conventional fuel sources mentioned in the RPPO may be exempted from this as they are already sourcing their power from such source.

**2.6** Hitherto experience shows that DISCOMs are not able to reach 50% of the target set by the Commission. Reasons for failure to supply/purchase NCE sourcewise and plantwise need to be analysed to understand the problems and constraints faced by the DISCOMs in procuring renewable power. Extent and potential of the NCE in the state needs a reappraisal. NEDCAP projects the potential at 4412 MW. The bases on which this forecast is made shall be made public and verified. In the Discussion Paper the DISCOMs are mentioned as saying that because of shortage of biomass supply they were not able to achieve the target. But there was no mention of other problems faced by them in procuring the power in required quantities. Three-fourths of the NCE potential is from small hydro and wind and their present contribution is less than 50%. Problems faced by these units also need to be examined. A Taskforce with the participation of all stakeholders may be constituted to go through all the issues involved in estimating the potential and realizing the potential.

**2.7** Specifically examine those units, which have obtained capital subsidy and see that they supply minimum quantity of power. NEDCAP be directed to make a list of such units and examine their contribution.

**3.1** NEDCAP suggested that instead of providing a upper ceiling on tariff the Commission shall prescribe a fixed tariff. The Commission had suggested the upper ceiling on tariff on the basis of 15 parameters. These parameters will be changing for each plant and given the number of plants it may not be possible to specify fixed tariff for each plant. It is for the respective DISCOMs to arrive at power purchase prices for each plant.

**3.2** NEDCAP has the audacity to say that if APERC is not inclined to consider fixed tariff it should stop from announcing any future RPPO. It is high time NEDCAP stops functioning as a Post Office for the NCE developers and apply its mind to the objectives for which it was made nodal agency – for developing NCE sources. For this we also suggest strengthening the nodal agency – NEDCAP – to discharge its duties efficiently rather than being just a post man for NCE developers.

**4.1** Follow environmental norms in setting up and operating the renewable power plants. Annual reports on compliance with environmental norms must be made compulsory, and some body like Pollution Control Board shall be entrusted with the responsibility to check this and give certificate. The DISCOMs on their part should have oversight mechanism to guarantee that the high price paid per unit is worth in terms of environment. Strict action shall be taken against the plants that fail to adhere to the environmental norms.

**4.2** Some of the NCE plants like biomass, bagasse and waste to energy are allowed to use coal and other fuels other than their main source to an extent of 30% only. It is based on this the renewable sources were awarded higher power purchase price and also treated as must run plants. The nodal agency for NCE plants in our state NEDCAP shall also be made responsible for adherence to environmental norms by these plants as it is exercising powers as the licensing agency. Whichever plant violates this norm shall be penalized. While the existing RPPO has provisions to penalize DISCOMs for not achieving the stipulated percentage there is no provision to penalize the plants for not following the fuel and environmental norms, and for not supplying the agreed quantum of power. Such provisions may be included in the new RPPO Order.

**5.1** Not to lift ban on new biomass based power plants. The said ban was imposed after it was clearly felt that the existing plants themselves are not able to run full capacity because of lack of renewable biomass sources. During the last few years there is no sign that these sources have increased to warrant lifting the said ban. If the ban is lifted not only the prices of these fuels would increase these plants may resort to environmentally harmful measures like felling trees indiscriminately, even in forest areas near the plants. Many such instances have taken place in the past. It is based on such experiences that the Commission had imposed the ban on new biomass based power plants. Even new CPPs based on biomass should not be allowed. According to the Discussion Paper DISCOMs have commented that though the installed capacity of non-conventional projects as a percentage of total installed capacity is over and above the specified 5% the total purchased energy as a percentage of total purchase by the DISCOMs is falling short because of shortage in fuel availability for bagasse and biomass based plants. Given this fact also, the ban imposed on biomass plants shall not be lifted.

**5.2** The Discussion paper refers to a letter from Rice Millers for plants to be set up on rice husk. The above said ban also covers these plants also. Most of the biomass based allowed are based on rice husk. When they are already running short of fuel there is no meaning in allowing new units. It is also important to note that the area under paddy did not increase, but in fact it declined. While area under paddy declined from 42,43,000 hectares in 2000-01 to 39,78,000 hectares in 2006-07 total production of paddy declines from 1,24,58,000 tonnes to 1,18,72,000 tonnes during the same period. Given this fact no new plant shall be allowed in this category. The problems sited by the Rice Millers can be solved by relocating the biomass based plants to the rice mills facing these problems!

**5.3** The Discussion Paper mentions that NEDCAP permitted 8 biomass based plants on the basis of additional plantations. We request the Commission to direct the NEDCAP to provide us all the information about these 8 plants.

**6.1** Hitherto experience with municipal waste to energy plants show that they are not working well in the state. These plants are closed most of the time. Same is the case in other parts of country. As in the case of AP in other parts of the country most of the plants are closed down. Particularly, the kind of municipal waste available for these plants is not suitable for efficient functioning of the plants. While plants need feed stock with 2,000 kcal the existing waste provides only 1000 kcal. Given the operational and

environmental problems posed by these plants these are being closed down in many countries. In February 2007 the European parliament refused to treat these waste to energy plants as recycling plants. Between 1985 and 1994 at least 280 such projects in US were cancelled. In 1996 in UK 23 such plants were closed down. In Japan between 1998 and 2002, 170 such plants were decommissioned and 509 plants are slated to be closed down. (Source: Down to Earth, March 15, 2007). In 2007 the Supreme Court also stayed subsidies being provided to such plants in our country. Given this experience we request the Commission not to allow any new plants under this category. In the state while 6 plants were sanctioned only three plants started operation and even these plants are not running properly and they are closed most of the time. In this background the remaining three plants shall also not to be allowed and the given sanction shall be cancelled.

**7.1** Wind energy: In Andhra Pradesh PLF of wind plants is lowest in the country – less than 10%. Need to examine the factors that are leading to such situation. One reason may be that given the capital subsidy which enables them to recover their capital cost within a short time they might have least interest in generating power.

**8.1** The issue related to tariff at which solar power need to be purchased outside MNRE Guidelines needs be taken up along with review of tariff of other sources. At the same time this tariff shall not be too high. Given high cost of solar power we suggest that the Governments may channel more funds in to R&D to bring down solar power generation costs rather than shore up known costly power.

**8.2** We suggest that the solar water heaters be made compulsory for residential buildings for obtaining new electricity connection or to continue to have the present connection as a part of encouraging renewable power. This can first be initiated in major urban centers and later spread to other parts of the state. Also, only standard apparatus must be allowed.

**9.1** The Order dated 20-03-2004 fixing power purchase cost from different sources of renewable power need to be thoroughly reviewed in the background of central and state governments' policy changes as well as developments in technical and financial sectors. This needs to be taken up as a separate exercise apart from the present effort to specify percentage of power to be procured from renewable sources. Before this, expeditious steps need to be taken to see that all pending cases on this Order in various courts are cleared.

**9.2** In the Discussion paper shows that some DISCOMs maintained that they were not suggesting any changes in tariffs because it is subjudice. If this is the case, we fail to understand how that Government of Andhra Pradesh announced increase in power purchase price from biomass units. In this context we also request the Commission not to take cognizance of the state government's Order increasing power purchase price from biomass units as under the Electricity Act 2003 only the Commission has powers to set the power purchase price from generating units.

**10.1** Once a PPA is signed any change in it other than change in the name of the power producer need to be treated as a new plant. Because, change in any parameter will have cost implications affecting the tariff at which power is to be procured.

Sincerely yours,

M. Thimma Reddy,  
Convenor