

**ORISSA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
UNIT-VIII, BHUBANESWAR -751 012**

Present : Shri D.C. Sahoo, Chairperson
Shri B.C. Jena, Member
Shri S. K. Jena, Member

Dated the 20th day of August, 2005

Case No. 14 of 2005

1. Project Developments Consultants
F-6, BJB Nagar
Bhubaneswar.

... Petitioner

- Vrs -

1. M/s. Grid Corporation of Orissa Ltd.
Janpath
Bhubaneswar.

For the petitioner - Shri R. P. Mohapatra

For the respondents - Shri A. C. Mallick, Sr. G.M. (PP), GRIDCO

ORDER

1. M/s. Project Development consultants, working as Business Associates of Indian Renewable Energy Development Agency (IREDA), a Govt. of India Enterprise are looking after development of sustainable energy in the State and encompassing Small hydropower projects upto 25 MW, Waste heat Recovery power projects, Wind power generation/photo voltaic projects etc. have filed a petition before the Commission with the following submissions :-

- 1.1 To direct GRIDCO to source at least 10% of the annual requirements of energy.
- 1.2 That the Hon'ble Commission in their Order dated 23.04.2005, relating to Case No.151 of 2004, have specified the quantum of energy to be sourced from the renewable energy projects as 200 MU for 2006-07" Where as the National Policy on Electricity envisages consumption of electricity from renewable sources to the tune of 10% of total consumption of electricity in the country by 2012.
- 1.3 That the Orders of the Hon'ble Commission may give rise to apprehension in the minds of the Developers as to the quantum of energy that would be sourced from renewable sources in the subsequent years.
- 1.4 That the Hon'ble Commission may pass Orders clarifying the position that in the subsequent years beyond 2006-07, the Hon'ble Commission will also specify the additional quantum of energy to be procured from renewable sources as 200 MU or more, depending on the number of projects under execution.
- 1.5 That the Hon'ble Commission, in their Order dated 23.04.2005, in case no 151/2004, have directed that the unit cost of renewable energy should not exceed the highest generation cost of the thermal stations in eastern India.
- 1.6 That the highest cost of generation in the KHSTPS is only 211.83 paise per unit for the year 2005-06, vide table 22 at page 61 of the Compendium of OERC Tariff Orders for the year 2005-06. As no new thermal stations are coming up, the cost of generation in 2006-07 will be lower. In subsequent years also, the cost of generation would be reduced unless there would be drastic increase in the cost of coal.

- 1.7 The revised cost of the renewable source of energy is competitive, but the cost during the first and subsequent years, till the debt has been repaid, will be higher on account of the high capital cost and need for advance depreciation to meet the debt repayment schedule.
- 1.8 That the Hon'ble Commission may therefore determine the Tariff based on the CERC norms for hydel generation, without linking it with cost of generation of energy from other sources.
2. That in reply to the prayer in Para 3 of the petition, the Respondent has agreed to procure the energy at the rates and the quantum as fixed by the Hon'ble Commission. However, the Respondent has stated that for purchase of additional quantum of energy, the rates shall be 200 paise per unit or less as per their guidelines.
 - 2.1 That the Respondent does not have any authority to fix the Tariff and the rate fixed by them will amount to coercive action.
 - 2.2 That it is therefore prayed that the Hon'ble Commission may also determine the Tariff at which GRIDCO may procure energy beyond the quantum specified.
3. That the Respondent does not agree to banking of energy for NRSE projects (especially for CPP) in line with the revised guidelines of the GoO dated 23.06.2003.
 - 3.1 That the Hon'ble Commission has approved banking of energy from CPPs and this is an important requirement for the small hydro stations as CPPs.

- 3.2 That the Hon'ble Commission may, therefore, approve banking of energy by micro/mini/small hydro stations, particularly those which are CPPs and who cannot export energy and the 3rd party sales, will be difficult.
- 3.3 That the generation of energy from the NRSE sources will be so low during the initial periods that banking of energy is not likely to cause financial loss to GRIDCO. However, in case GRIDCO is affected in future, it can approach the Hon'ble Commission for redressal.
4. M/s. GRIDCO, the respondent in its reply have stated as follows :-
- 4.1 GRIDCO will abide by the direction of the Hon'ble Commission in the matter of procurement of power from NRSE Project.
- 4.2 As per the Article 62(1) (a) of Electricity Act, 2003, the Appropriate Commission (OERC) shall determine the tariff for supply of electricity by a generating company. Further, the Article 62(2) indicates that the Appropriate Commission may require a licensee or a generating Company to furnish separate details as may be specified in respect of generations for determination of Tariff.

In view of above, Hon'ble OERC may direct the Generating Company to furnish the details of Cost of Generation to fix up the Tariff. The tariff decided by Commission on NRSE Projects shall be binding on GRIDCO.

- 4.3 Tariff and quantity of power to be procured from NRSE Project will be guided by OERC Order for the entire period. Beyond the limit stipulated by OERC, GRIDCO may consider to purchase power from such Units @ Rs.2/- or less as per the guidelines in force in GRIDCO.

- 4.4 At present, GRIDCO has no plan on banking of power in view of the uncertain hydrological conditions. However, GRIDCO will purchase the power at the cost and quantity to be decided by the Hon'ble Commission. Non-discriminatory open access is provided in the Electricity Act, 2003. If GRIDCO does not buy the power, GRIDCO will not be a bar to the developer selling the power through any other trader.

GRIDCO will let grid access as per the conditions stipulated in the grid code/IEGC and connectivity condition laid down by CERC/CEA from time to time.

5. M/s. Orissa Power Transmission Corporation Ltd. (OPTCL) entered into appearance and have stated as follows :-

- 5.1 OPTCL has been duly discharging its obligations of the Transferee under Clause 11 of the Transfer Scheme as a Deemed Transmission Licensee from the date of the transfer i.e. w.e.f. 01.04.2005 in accordance with Govt. of Orissa, Dept. of Energy Notification No.6899 dt.09.06.2005. As regards the issue of providing with necessary facility of banking to NRSE projects including (co-generation projects from waste heat) as prayed by the Petitioner and mentioned at para 4 above, it is contended that no mention has been made regarding provision for such facility of energy banking in the National Electricity Policy prepared and published by Gazette Notification dt.12.02.2005 of Ministry of Power, Govt. of India pursuant to Section 3 of the Electricity Act, 2003. However, while addressing the issue of Cogeneration and Non-conventional Energy Sources the following has been mentioned at Para 5.12.3 of the aforesaid policy which inter-alia is stated as under :-

“Para 5.12.3 :- Industries in which both process heat and electricity are needed are well suited for cogeneration of electricity. A significant

potential for cogeneration exists in the country, particularly in the sugar industry. SERCs may promote arrangements between the co-generator and the concerned distribution licensee for purchase of surplus power from such plants. Cogeneration System also needs to be encouraged in the overall interest of energy efficiency and also grid stability.”

- 5.2 Regarding the issue of providing with necessary facility of grid access as prayed by the petitioner. OPTCL submit that the matter pertaining to grid access is now governed by OERC Notification dt.06.06.2005 on open access to the intra-state transmission and distribution systems called as the "Orissa Electricity Regulatory Commission (Terms and Conditions for Open. Access) Regulations, 2005" effective from 21.06.2005 which would cater to open access customers both long-term and short-term.

6. The Commission's order in case No.151 of 2004 of M/s. Greenpeace India society, Chennai is summarized as under:-

Keeping in view the facts and provisions of the Electricity Act, the Commission had decided that in the financial year 2006-07, 200 MU of power would be earmarked for procurement by GRIDCO or Distribution licensee or State Trading Company at a unit cost not exceeding the highest generation cost of thermal stations of the Eastern Region. Having come to such a conclusion, the Commission further stated that the tariff for the renewal sources of energy would be determined by the Commission in accordance with Section 62(1)(a) of the Electricity Act, 2003.

7. Paragraphs 5.2.20, 5.12.1 and 5.12.2 of the National Electricity Policy of the Govt. of India published in the Extra Ordinary Gazette of India dated 12th February, 2005, which are relevant to the present case are reproduced below :-

- "5.2.20 Feasible potential of non-conventional energy resources, mainly small hydro, wind and bio-mass would also need to be exploited fully to create additional power generation capacity. With a view to increase the overall share of non-conventional energy sources in the electricity mix, efforts will be made to encourage private sector participation through suitable promotional measures.*
- 5.12.1 Non-conventional sources of energy being the most environment friendly there is an urgent need to promote generation of electricity based on such sources of energy. For this purpose, efforts need to be made to reduce the capital cost of projects based on non-conventional and renewable sources of energy. Cost of energy can also be reduced by promoting competition within such projects. At the same time, adequate promotional measures would be also have to be taken for development of technologies and sustained growth of these sources.*
- 5.12.2 The Electricity Act 2003 provides that co-generation and generation of electricity from non-conventional sources would be promoted by the SERCs by providing suitable measures for connectivity with grid and sale of electricity to any person and also by specifying, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of distribution licensee. Such percentage for purchase of power from non-conventional sources should be made applicable for the tariffs to be determined by the SERCs at the earliest. Progressively the share of electricity from non-conventional sources would need to be increased as prescribed by State Electricity Regulatory Commissions. Such purchase by distribution companies shall be through competitive bidding process. Considering the fact that it will take some time before non-conventional technologies compete, in terms of cost, with conventional sources, the Commission may determine as appropriate differential' in prices to promote these technologies."*

Further, Section 86(1)(E) enjoins upon the Commission 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, and also specify for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee.”

8. Thus, it is evident that the National Electricity Policy does not envisage procurement of 10% of total consumption of electricity in the country by 2012 as claimed by the petitioner in its submission. However, there is no denying the fact that renewable sources of energy including non-conventional sources are eco-friendly and need to be encouraged especially when we are facing pollution problems owing to operation of large thermal plants and rapid depletion of the fossil fuels.
9. In View of the above, the Commission would like to observe as follows :-
 - (a) The Commission in its order dt.23.04.05 in case No.151/04 had allowed procurement of power upto 200 MU by GRIDCO/DISTCOs/State Trading Company during the FY 06-07. In exercise of the power conferred under Section 86(1)(a) and (b) the Commission further directs that procurement of power from non-conventional and renewable energy such as, small hydro, wind, biomass, co-generation of electricity from waste heat products etc. would be allowed by the supply licensees for use of consumers within the State upto 3% of the total purchase during the FY 07-08 to go up at the rate of 0.5% per annum for each subsequent year to reach a level of 5% by the year 2011-12.
 - (b) The project cost fixed by the State Technical Committee after due diligence will be taken as the ceiling cost for determination of tariff.

- (c) The tariff for procurement of the power from this sources will be determined by the Commission under Section 62(1)(a) so long as this power is being supplied to the state consumers through distribution companies.
- (d) As envisaged in the National Electricity Policy to encourage competition for reduction in cost of energy purchase of power by DISTCOs shall be through competitive bidding process within the same sources of generation where the price determined by the Commission under Section 62(1) shall be treated as the ceiling price.
- (e) The Commission is aware that small, mini, micro plants may not be in a position to arrange for connectivity with the OPTCL as the cost of such arrangements may be quite exorbitant rendering the project unviable. Therefore, the generating companies of non-conventional and renewable sources may be permitted by DISTCOs/OPTCL to deliver the power at 11 KV or 33 KV as the case may be. Depending upon the techno-commercial viability of the project, the interconnection point for delivery of power may be at 132 KV.
- (f) The National Electricity Policy does not envisage banking of energy but expects the SERCs to promote arrangements between a co-generator and the concerned distribution licensee for purchase of surplus power from such plants. The policy also envisages harnessing of spare capacity energy from CPPs. Introduction of intrastate availability based tariff has become very urgent for smooth operation of the grid system. The co-generation plants & CPPs will be generating power to meet the industrial requirement and the inadvertent energy injection to the system may not be always compatible with smooth grid operation creating commercial

burden for the utilities in the present regime. Besides, the CPPs/Co-generators or other non-renewable source of energy connected to the EHT will have to become ABT complaint. The Commission in para 6.28.2 of BST order dt.22.03.2005 had observed for framing of a suitable regulation/guideline for intrastate-ABT, which will be binding on all the users of the system.

Captive generators and co-generators with firm surplus power will have to be treated like any other generators. It, is only when inadvertent power flow takes place from these sources, the same has to be purchased by the distribution, licensee at mutually acceptable terms and conditions to be decided In the tariff hearing.

Generators not covered under the aforesaid categories are going to be regulated through determination of tariff by the Commission for which the concept of energy banking is not acceptable to the Commission.

This disposes of the case under reference and supersedes the Commission's order dt.23.04.2005 in case No.115 of 2004.

Sd/-
(S. K. JENA)
MEMBER

Sd/-
(B. C. JENA)
MEMBER

Sd/-
(D. C. SAHOO)
CHAIRPERSON