

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

Present : Shri D.C.Sahoo, Chairman
Shri H.S Sahu, Member
Shri B.C. Jena, Member

Case No.60/2002

M/s Bhushan Limited,
1st Floor, F-Block, International Trade Tower,
Nehru Place, New Delhi **Petitioner**

- Vrs. -

1. M/s.Grid Corporation of Orissa Ltd.,
Janpath, Bhubaneswar
2. M/s Western Electricity Supply Company
of Orissa Ltd., At/P.O.Burla, Dist. Sambalpur **Respondents**

For petitioner : Shri Bipin Jain, G.M.(P), Bhushan Ltd.

For respondents No.1 : Shri Sasanka Mishra, A.G.M.(PP), GRIDCO

For respondents No.2 : Shri R.R. Supkar, Exe. Engr., WESCO

Date of argument : **31.01.2003**

Date of Order : **19.02.2003**

ORDER

M/s. Bhushan Limited with its registered office in 1st Floor, F-Block, International Trade Tower, Nehru Place, New Delhi applied to OERC for permission to set up a 140 MW (2X70MW) Captive power plant at Rengali in the district of Sambalpur by utilising the coal middlings left out from the washery plant and the waste heat from their DRI kilns.

2. M/s.Bhushan Ltd. have mooted a proposal to set up a steel plant in Rengali by adopting coal based-Direct Reduction-Electric Arc Furnace-Blast Furnace – BOF-CSP route. In their application, they have stated that the steel making being a highly energy intensive industry, availability of cheap and reliable power on sustained basis is considered quaint essential for viability of the industry. As such, the basic fuel for the power plant will be coal middlings left out in the process of upgrading the coal through washery plant. Unless these coal middlings are utilised or disposed, they would pose environmental problems. Storage for a long time is hazardous. Further, these cannot be sold to the outside parties as per existing rules of captive mines. Along with the coal middlings, power plant would also utilise the waste flue gas of the DRI kilns which otherwise would have to be discharged to the atmosphere resulting in environmental pollution. Thus, the entire operation of the plant is carried out more or less with the by-products and the waste heat from the steel plant, obviating the risk of environmental pollution.
3. The cost of generation per KW hour as estimated by them would be around Rs.2.37 paise (fixed cost Rs.1.43 paise + variable cost Rs.0.94 paise). The power plant is proposed to operate in parallel with the grid system and this would meet the captive load of around 90 MW while surplus power to the extent of 46 MW is proposed to be sold to GRIDCO as per mutual agreement. The applicant has completed all the formalities by 17.10.2002.
4. GRIDCO and WESCO in whose licensed area, the plant is to be located, were asked to furnish their views/objections, if any, on the proposal by 17.11.2002. GRIDCO in their letter No.5160 dated 11.12.2002 observed that they do not have any objection to the proposal despite availability of surplus power with them. However, they requested OERC to restrict the capacity of the plant sufficient to meet their own demand. Further, they have also stated that in case, consent is accorded for installation of the captive plant, the following points need to be considered.

- (a) The applicant has to undertake construction of 220 KV line (DC) and bay extension at Budhipadar grid substation at their own cost.
- (b) Cost for system stability studies to be carried out by GRIDCO arising out of capacity addition to the system will be met by the applicant.
- (c) Power plant once connected to the grid has to follow the Grid discipline. GRIDCO will not be responsible for any financial liabilities arising out of loss of load or generation or damage to the plant on account of system disturbances while the power plant is running in parallel with the grid.
- (d) Appropriate metering and protective devices and upgrading of the substation, if necessary, will have to be taken care by the applicant.
- (e) For any excess power drawl by the plant, they shall have to pay at the rate of highest power purchase cost of GRIDCO during the month.
- (f) Surplus power injected to the grid system after mutual agreement shall be paid for as per the PPA to be negotiated and subject to approval of OERC.
- (g) No third party sale is to be allowed to the plant.
- (h) In case of violation of above terms and conditions, they have requested OERC to withdraw the permission if granted.

5. WESCO in their letter No.258 dated 15th November, 2002 wanted Bhushan Limited to enter into a supply agreement having contract demand for 140 MW with the licensee and another agreement for construction power required for the plant. However, in their subsequent letter No.309 dated 2nd December, 2002 they conveyed their no-objection to the proposal.

6. Looking at the proposal, Commission is convinced that the captive power plant as proposed by the applicant will be environmental friendly since it utilises the coal middlings left out in the process of upgrading in the coal and waste heat out of the DRI kilns. It is obvious that power from such captive plant will be much cheaper as compared to WESCO's existing tariff category. Further, the operation of the plant would not suffer because the plant can operate either in stand-alone mode or grid integrated mode. In fact, Government of India have requested all the State Governments to frame policy guidelines for Co-generation plants for their development. Keeping in view of the draft policy guidelines for CPP for Orissa furnished by OERC to Department of Energy for finalisation and also no objections of GRIDCO and WESCO, the Commission issues **IN-PRINCIPLE APPROVAL** for installation of the plant subject to fulfillment of the terms and conditions stipulated at (a) to (h) of para 4 supra. The final approval will be issued in consultation with CEA. The Commission is not inclined to review the capacity of the captive plant as prayed for by GRIDCO since it would defeat the very purpose of optimum disposal of the waste products. Further, with the opening up of evacuation facilities in the Eastern Region , the disposal of surplus power either by GRIDCO or by the applicant would not be difficult.

(B.C Jena)
MEMBER

(H.S.Sahu)
MEMBER

(D.C.Sahoo)
CHAIRMAN