

**ORISSA ELECTRICITY REGULATORY COMMISSION  
BIDYUT NIYAMAK BHAVAN  
UNIT – VIII, BHUBANESWAR – 751012**

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

**CASE No.48/2002**

Jindal Steel & Power Ltd.,  
Jindal Centre, 12, Bhikaiji Cama Place,  
New Delhi – 110 066

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**Petitioner**

- Vers. -

1.     Grid Corporation of Orissa Ltd.,  
       Janpath, Bhubaneswar.
2.     Central Electricity Supply Company of Oriss Ltd.,  
       IDCO Towers, 2<sup>nd</sup> Floors, Bhubaneswar.
3.     North Eastern Electricity Supply Company  
       of Orissa Ltd., Januganj, Balasore.

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**Respondents**

For petitioner	:	Mr. P.P. Panda, Advocate
For respondent No.1	:	Mr. S. Misra, A.G.M. (PP),
For respondent No.2	:	Mr. J. Jena, Sr. G.M.
For respondent No.3	:	Mr. P.K. Das, G.M.

Date of hearing :       **08.11.2002**

Date of order     :       **23.11.2002**

**ORDER**

1.     M/s Jindal Steel & Power Ltd., Jindal Centre, 12, Bhikaiji Cama Place, New Delhi – 110066 (petitioner) has applied for grant of consent u/s 44 of the Electricity (Supply) Act, 1948 r/w Sec. 21(3) of the Orissa Electricity Reform Act, 1995 for setting up of a 2X50 MW (2X62.5 MVA) (AFBC Boiler using washery coal reject and associated T.G.) CPP at Niranjapur, Dist. Angul and 4X25 MW (4X31.25 MVA) (using waste gas based WHRB Boiler, and Char/Coal

finer based AFBC boiler and associated T.G.) CPP at Deojhar, Dist. Keonjhar. Both the CPPs are intended to run in parallel with the Grid.

2. The petitioner has its industrial requirement of 30 MW at Talcher as noted below out of 90 MW power to be made available from its 2X50 MW Niranjanpur CPP (after consuming an auxiliary consumption of 10 MW).

a)	Coal mine/washery at Talcher	-	5 MW
b)	Coal gasification/Oxygen Plant at Talcher	-	25 MW
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Total :			30 MW

This Niranjanpur CPP shall be connected at 220 KV to GRIDCO's Meramundali substation. 60 MW surplus power of Niranjanpur CPP is required to be wheeled through GRIDCO's EHT system to its Deojhar industrial units via 220 KV Joda S/s of GRIDCO. Deojhar 4X25 MW CPP shall consume 10 MW auxiliary power and the balance 90 MW power shall add to the 60 MW wheeled power and the total 150 MW power shall be utilized in the petitioner's industrial units at Deojhar in the following manner:

a)	DRI Plant, Deojhar	-	10 MW
b)	HBI Plant, Deojhar	-	15 MW
c)	FM/FC Plant, Deojhar	-	30 MW
d)	Steel Plant, Deojhar	-	95 MW
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Total:			150 MW

The petitioner shall have its own 220 KV Switchyard adjacent to its CPPs at Niranjanpur and Deojhar from which it shall have its own 220 KV network to connect with GRIDCO's S/s at Meramundali and Joda respectively. Cost of generation at Niranjanpur and Deojhar CPPs has been given by the petitioner as 158 P and 148 P per unit respectively.

3. GRIDCO (respondent No.1) has pleaded for consideration of the following points while granting consent to set up the CPPs.
- a) Load flow study for wheeling of 60 MW power to Joda through the existing TTPS-Joda was conducted and found feasible.
  - b) The petitioner is to construct 220 KV double circuit line from their power plant at Niranjapur to Meramundali and from Joda 220 KV Grid S/s to Deojhar with necessary bay arrangements at these Grid substations at their own cost or deposit the amount as estimated by GRIDCO for construction by its transmission project wing.
  - c) System stability study required for parallel operation of their system with the Grid system has to be done by the petitioner at their own cost and report submitted to GRIDCO.
  - d) Any cost of upgradation of GRIDCO system arising out of such parallel operation has to be borne by the petitioner.
  - e) Petitioner has to sign an agreement with GRIDCO for the proposed wheeling of 60 MW power from Meramundali to Joda.
  - f) Petitioner has to pay wheeling charges + transmission loss charges as per the rate approved by OERC from time to time.
  - g) GRIDCO shall not incur any financial liabilities whatsoever due to loss of load or generation or damage to the plant on account of system disturbances and system conditions while running parallel with integrated grid system.

- h) Suitable export/import energy meters (Main & Check) of 0.2 accuracy class properly tested and duly sealed shall be installed by the petitioner at their cost at each inter-connection point with GRIDCO network for recording energy export and import by them.
  - i) Any excess drawal of power by the petitioner from Joda grid s/s than the power injected at Meramundali grid s/s less the approved transmission loss shall be paid by them at the rate of the highest power purchase cost of GRIDCO during the month.
  - j) Petitioner shall have to comply with GRID CODE while running in parallel operation with GRIDCO system.
  - k) In case of power need by GRIDCO, the petitioner will supply power to GRIDCO with similar terms and conditions applicable to other CPPs of the State at a rate mutually decided and approved by Orissa Electricity Regulatory Commission.
  - l) Any change in parameter that is likely to affect GRIDCO's system shall not be done without written approval of GRIDCO.
  - m) The permission granted for parallel operation shall be withdrawn at any time if the petitioner violates any one of the above conditions.
4. CESCO (respondent No.2) in its letter dt.24.06.2002 has pleaded that it has no objection for setting up of 2X50 MW capacity generating station by the petitioner at Niranjapur in the district of Angul. GRIDCO has to accord necessary clearance for parallel operation (when required), protection, interlocks etc. Colony and auxiliary supply can be availed from CESCO by the petitioner as per relevant regulation under the Distribution Code.

5. NESCO (respondent No.3) has given its no objection to the proposed CPP at Deojhar in its letter dt.03.10.02.
6. The petitioner reacted to the views of the respondents in its letter dt.18.10.2002 in the following manner :
  - A) For reliable and safe operation of power plant, it is pertinent to draw the auxiliary power requirement directly from the power plant and therefore, availing power from CESCO for auxiliary supply of power plant will not be feasible.
  - B) Petitioner would like to supply power to the colony from the proposed power plant, as the colony will be located near to the power plant site. When the petitioner is putting up 100 MW captive power plant, CESCO should not insist for supplying power to their colony, when it cannot supply at a rate below its cost of generation.
  - C) The transmission line from Niranjapur to Meramundali and from Joda s/s to Deojhar site shall be constructed by the petitioner at their own cost.
  - D) The MOU with the Govt. of Orissa for setting up the proposed sponge iron/steel plant and power plant has been finalized and is expected to be signed shortly. A copy of the same will be forwarded immediately thereafter to OERC.
  - E) The petitioner proposes to set up 100 MW capacity captive power plant at Niranjapur due to the following reasons:

Lot of coal washery rejects having very high ash content will be generated from the coal washery, which have to be utilized to generate power. This will not only help on solid waste management but will reduce environmental hazards to a large extent and will also be able to help in

power generation economically. The captive power plant, apart from being energy efficient will effectively utilize the washery rejects for gainful use in the form of power generation. The proposed steel plant will require uninterrupted and reliable power supply, which can be ensured by having own captive power plant. The cost of generation of power from CPP using coal washery rejects/hot flue gases will be lower as compared to the tariff applicable. Use of own power from CPP will improve the economic viability of the project. In these premises, it is not possible to purchase additional power required at Deojhar site from GRIDCO by reducing the capacity of captive power plant at Niranjapur as proposed by GRIDCO.

- F) The System Stability Study required for parallel operation of captive power plant with grid system shall be conducted by the petitioner at their own cost and report submitted to GRIDCO.
- G) Any cost of upgradation of GRIDCO system, if required, due to parallel operation shall be borne by the petitioner.
- H) Petitioner will sign an agreement with GRIDCO for the wheeling of 60 MW power from Meramundali to Joda. Petitioner shall pay the wheeling charges + transmission loss charges as per the rates approved by OERC.
- I) Appropriate export/import energy meters shall be installed by the petitioner at their own cost at interconnection points with GRIDCO network for recording energy export/import.
- J) Petitioner will follow Grid Code discipline while running its power plant in parallel operation with GRIDCO system.
- K) Petitioner shall not change or deviate from any parameters that will likely affect GRIDCO system without any written approval from GRIDCO.

- L) Any excess drawl of power by the petitioner from Joda S/s than the power injected at Meramundali Grid S/s less the approved transmission losses shall be paid by the petitioner at normal tariff rates of GRIDCO.
  - M) The power required during the construction of power plant, shall be sourced by the petitioner from NESCO.
7. We have heard all the parties. At the time of hearing, none of the respondents has raised any objection to the establishment of the proposed CPPs except the representative of GRIDCO who has stated that establishment of CPP will affect their business prospect as they have still surplus power. Establishment of the proposed CPPs is not likely to cause any loss to the respondents. For rapid industrialization in the State, it is desirable that consent should be given to the petitioner to set up the proposed CPPs. Hence ordered.

### **ORDER**

That the petitioner shall be given consent to set up 2X 50 MW CPP unit at Niranjapur and 4X25 MW CPP unit at Deojhar after consultation with CEA as required u/s 44(2A) of the Electricity (Supply) Act, 1948 and subject to the following terms and conditions:

- i) The generation of power from the CPPs should be restricted to the requirements of the petitioner.
- ii) Commissioning of the CPPs in all respect shall be completed within 5 years from the date of this order, failing which fresh consent of the Commission has to be sought.
- iii) Any sale of power to GRIDCO or third party shall need prior approval of this Commission through separate filing.

- iv) GRIDCO shall not incur any financial liability whatsoever due to loss of load or generation or damage to the plant on account of system disturbance and system conditions while running in parallel with integrated GRIDCO's system.
- v) The cost of any upgradation of equipments on GRIDCO's system due to increase in fault level arising out of such parallel operation of the CPPs shall be borne by the petitioner. Petitioner shall conduct a system study taking into account their proposed parallel operation of CPPs and apprise the same to GRIDCO regarding its compatibility with GRIDCO system.
- vi) The petitioner shall follow the Grid Code disciplines while running in parallel with GRIDCO system.
- vii) Petitioner shall furnish the full technical details of its equipments of the CPP to GRIDCO before procurement and obtain GRIDCO's "No Objection" to ensure safety of the Grid.
- viii) Wheeling and connection arrangement between the petitioner and GRIDCO shall be as per appropriate statutory norms.

Given under the hand and seal of the Commission, this day the 23<sup>rd</sup> November, 2002.

**(B.C. Jena)**  
**MEMBER**

**(H.S. Sahu)**  
**MEMBER**

**(D.C. Sahoo)**  
**CHAIRMAN**