

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

**Present : Shri D.K.Roy, Chairman
 Shri H.S. Sahu, Member**

Case No.1 of 2001

M/s Oswal Chemicals & Fertilizers Ltd., Paradeep. Petitioner

- Vrs. -

M/s Central Electricity Supply Co. of Orissa Ltd., Respondents
Bhubaneswar & another.

For Petitioner : Mr. M.R. Mohanty,
 Authorised Representative.

For Respondent No.1 : Mr. K.B. Patra, S.E. (P&M)

For Respondent No.2 : Mr. N.C. Nayak, Sr. G.M. (R&T)

Date of argument : **30.01.2001**

Date of Order : **20.02.2001**

ORDER

This is an application filed by M/s Oswal Chemicals & Fertilizers (hereafter for short, M/s OCFL) on 16.12.99 u/s 44 of the Electricity (Supply) Act, 1948 (hereafter, for short, the Act, 1948) r/w Section 21(3) of the Orissa Electricity Reform Act, 1995 (hereafter, for short, the Act, 1995) for grant of consent for setting up of a 2X68.75 MVA Co-generation T.G. Set & 3X500 KVA Standby D.G. set at Musadih, Paradeep, Dist. Jagatsinghpur.

2. As indicated by the applicant, this steam generating from the Sulphuric Acid Plant will be utilised for generating power. The Sulphuric Acid will be used for production of chemicals and fertilizers.

3. The respondent No.1 M/s CESCO has objected to grant of consent on the following grounds in respect of 2X68.5 MVA Co-generation T.G. Set.
- (i) That the cost of generation of power from the plant would be Rs.1.61/KWh instead of Rs.1.12/KWh as calculated by the petitioner. Further, as the CPP is a Co-generation steam turbine power plant, the availability of steam is solely dependent upon the chemical process of the sulphuric acid plant. Being a chemical plant, the sulphuric acid process plant would be available for operation for a maximum period 6 to 7 months within a year, as such type of plants require frequent maintenance. As the generating plant cannot avail steam throughout the year, for generation of power, the annual generation has to be calculated considering the time of period for annual maintenance of the Sulphuric Acid Plant. Taking into consideration the above factor, the tariff will go up much higher than estimated by the petitioner.
 - (ii) As per the agreement made on 31st August, 1999 between CESCO and OCFL for supply of power with a contract demand of 10 MW, the contract will continue for 5 years from the beginning. During the subsistence of the agreement, M/s OCFL is to pay minimum monthly charge, demand charge, energy charge and other charges in accordance with the provisions of OERC Distribution (Conditions of Supply) Code, 1998 and as notified in the tariff notification from time to time.
 - (iii) As per the load forecast made by GRIDCO based on prevailing trend of power consumption, it is clear that GRIDCO is surplus in power in the next 10 years. Therefore, CESCO can provide adequate power to the applicant as per its need. As regards the power interruptions, CESCO has submitted that the same is very nominal in nature and it is making constant effort to reduce it by holding necessary discussion with GRIDCO.
 - (iv) That the petitioner has already set up the CPP without prior consent of the OERC though it is claimed that the same is only under trial

run. The said CPP of the petitioner is being run in parallel with the system of the Licensee.

4. While raising aforesaid objections, however, CESCO have stated that in case the Commission grants consent in spite of objection, the following conditions may be stipulated:

- (i) CESCO/GRIDCO will not purchase any power from their CPP and the petitioner will not be allowed to sale power to any one. Accordingly the power generation should be restricted as per the plant requirement only.
- (ii) As the industry belongs to the license area of distribution and retail supply, the petitioner cannot use CPP power for their colony purpose for which it has to purchase power from CESCO.
- (iii) The petitioner should take steps immediately to make complete isolation of its transmission system from the system of the CESCO/GRIDCO so that it cannot avail of start up power or emergency power from the system of the opposite party during any contingency.

CESCO however has no objection to grant consent for 3X5 MW standby D.G. sets subject to the condition that he fulfils all the statutory provisions.

5. GRIDCO, the respondent No.2, in its reply dt.16.8.2000 has also objected to grant of consent on the following grounds:

- (i) The cost of generation is calculated at Rs.1.63/KWh for the first year which is higher than claimed.
- (ii) GRIDCO is surplus in power and can supply adequate power as per the need of the company.

- (iii) Regarding power interruption, GRIDCO is making constant efforts to reduce the interruptions. As the grid is connected to EREB, the frequency and voltage of system is influenced by the entire EREB system and GRIDCO does not have much control over it. GRIDCO in its endeavour to control the frequency and voltage is holding discussions with Eastern Region Forum.
6. GRIDCO has further stated that in case the Commission gives consent for setting up the Co-generation plant, then the following conditions should be imposed:
- (i) The generation of power from the CPP should be restricted to the requirement of the Company's plant & its auxiliary units as outlined in their application.
 - (ii) The company should have no right for sale of power to GRIDCO or to any other party.
 - (iii) The company should make adequate arrangements for installation of Reverse Power Relay at their 132 KV receiving end to prevent the flow of power to GRIDCO system and in case it flows inadvertently when running in parallel, no charges fees, duties, will be payable by GRIDCO. Regarding any drawal of power from GRIDCO System by the company, necessary agreement has to be made with CESCO/GRIDCO.
 - (iv) GRIDCO shall not incur any financial liability, what so ever due to loss of load or generation or damage to the plant on account of system disturbances and system unstable conditions while running in parallel with the integrated GRIDCO system. The company shall also make necessary arrangements so that their plant gets isolated from the GRIDCO system automatically in the event of any instability either in their system or in the GRIDCO system.
 - (v) Coordination of protective relays at Company's premises shall be done as per the direction of GRIDCO.

- (vi) The cost of up-gradation of equipments on GRIDCO's system due to increase in fault level arising out of such parallel operation of the CPP shall be borne by the company.
- (vii) The company should follow the GRID CODE discipline while running in parallel with GRIDCO system.
- (viii) The permission granted for parallel operation can be withdrawn at any time if the company violates any of the conditions.
- (ix) Suitable export/import energy meter of 0.2% accuracy class, properly tested and duly sealed should be installed by the company at the inter connection point (i.e. Paradeep Substation) with GRIDCO for recording any energy exchange and preparation of the bills in case any supply has been made by GRIDCO/CESCO.
- (x) Any change in the parameter, which is likely to affect GRIDCO system shall not be done without the written approval of GRIDCO.

7. In response to the objections raised by CESCO and GRIDCO the petitioner has furnished the following rejoinder:

- (i) The cost of generation of power from CPP is way behind the cost at which CESCO can supply power. While the cost of generation of power from the CPP will decrease year by year, it will go up year by year if supplied by CESCO.
- (ii) That there is no assertion either by CESCO or GRIDCO, that the required quantity of power can be supplied to the applicant economically within a reasonable time as laid down u/s 44(1)(a)(ii) of the Act, 1948.

8. We have examined in detail, the filing of M/s OSFL, under Section 44 of the Act 1948 read with Section 21(3) of the Act, 1995, subsequent information and clarification filed before us as well as written and oral representation of the

respondent. We strongly disapprove the conduct of the applicant in acquiring, installing and running generating stations without prior approval of the OERC. The applicant has apparently transgressed the provisions of law and safety considerations. However, since separate proceeding has been started on this issue, we refrain from passing any direction with regard to the same in this order. Without prejudice the same, we have considered the grant of consent under Section 44 of the Act, 1948 read with Section 21(3) Act, 1995, for which, the crucial issue is whether power required by the applicant can be acquired at a more economical rate from any alternative source. In the light of analysis given below, we find that the objectors have not been able to prove the same.

9. The staff of the Commission have examined the cost of generation and has found it at Rs.1.55/unit at 60% LF. Compared to that, the sale price of the licensee (CESCO at 60% LF is Rs.2.97/unit which is much higher. Thus the power to be supplied by the licensee will be costlier than that from CPP.
10. Further, GRIDCO has admitted that since their system is connected to EREB, the frequency and voltage of system are influenced by the entire regional system and GRIDCO does not have much control over it. Thus GRIDCO and for that matter CESCO will not be able to provide quality of power which is essential for running a chemical plant.
11. Thus in the facts and circumstances of the case, the Commission is of the opinion that the consent, as prayed for, may be granted in favour of the petitioner. Further, while granting consent to M/s OCFL, Commission has to take the note of the fact that the power procurement, planning and financial viability of the licensee's area is not adversely affected. Accordingly, certain stipulations as below have to be incorporated in the consent order, when issued:
 - (a) While setting up the proposed CPP, the petitioner shall adhere to the standards and parameters mentioned in the DPR. In case any deviation is considered necessary, prior approval of the Commission shall have to be taken.

- (b) The applicant must ensure that the generation of power is restricted to its own requirement and there should be no generation for sale purposes.
 - (c) Necessary technical evaluation with System Study, Load Flow Study, Fault Study has to be conducted at the cost of the applicant.
 - (d) The applicant shall bear the cost for any upgradation of the equipments of GRIDCO which may arise due to rise in fault level consequent to parallel operation of 2X55 MW power station.
 - (e) The applicant shall have no claim for sale of power to GRIDCO or to any other person. In case power has to be sold to GRIDCO at a future point of time, this has to be done only after obtaining prior approval from the OERC through a separate proceeding.
 - (f) The licensee shall supply emergency power to applicant's CPP at rates approved by the Commission.
 - (g) The CPP shall comply with the Grid Code and Operating Procedure and instructions of all statutory and regulatory authorities as applicable for operation of Captive Power Plant in Orissa connected with the State/Regional Grid.
 - (h) GRIDCO shall not be liable to pay for any inadvertent supply of surplus power to its system unless it is contracted for nor shall be liable to pay any compensation for loss of generation or damage to equipments of CPP while operating in parallel due to disturbances of the Grid System.
12. Subject to above said direction and observations, the Commission is inclined to grant of consent in principle to the petitioner for setting up a CPP of 2X68.75 MVA Co-generating Plant to be operated in parallel with GRIDCO's system. But before the consent can be granted we are obliged by law to consult the CEA in

accordance with provisions of sub-section (2-A) of Sec.44 of the Act, 1948. Hence, we order that the case be referred to CEA in terms of aforesaid sub-section (2-A) of Section 44 of Act, 1948.

13. As regards, permission for setting up 3X5 MW D.G. Set, it is ordered that the same has to be deferred until after receipt of response from CEA to the references made regarding Co-generating T.G. Set as indicated earlier.
14. Pronounced this day the 20th February, 2001. Copy to be given to the petitioner, respondents and Central Electricity Authority.

Sd/-(H.S. SAHU)
MEMBER

Sd/- (D.K. ROY)
CHAIRMAN

**ORISSA ELECTRICITY REGULATORY COMMISSION
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Date of Order : 16.07.2001

ORDER

Since some typographical errors have appeared in the final order dt.20.02.2001 in this case, it be read corrected as follows:-

- i) In paragraph 1, after the words "T.G. Set &", it be added "and another application dated 11.06.2000 for";
- ii) in paragraph 4 (iii), "3X5 MW" be read as "3X500 KVA"; and
- iii) in paragraph 13, "3X5 MW be read as "3X500 KVA".

This be form as part of the original order dt.20.02.2001.

**Sd/-
(H.S. SAHU)
MEMBER**

**Sd/-
(D.K. ROY)
CHAIRMAN**