# ODISHA ELECTRICITY REGULATORY COMMISSION BIDYUT NIYAMAK BHAWAN, UNIT – VIII. BHUBANESWAR – 751 012

Shri S. P. Nanda, Chairperson Shri K. C. Badu, Member Shri B. K. Misra, Member

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**Present** 

Case No. 99 of 2011 M/s. JSL Stainless Ltd. Petitioner Vrs. GRIDCO & another Respondents ..... In the matter of: An application under S. 86(1) of the Electericity Act, 2003 read with the OERC (Conduct of Business) Regulations, 2004. And Case No. 100 of 2011 M/s. Confederation of Captive Power Plants Petitioner . . . . . . . . . . . Vrs. GRIDCO & another Respondents . . . . . . . . . . . In the matter of: An application under S.86 (1) of the Electricity Act, 2003. And Case No. 101 of 2011 Petitioner M/s. Nava Bharat Ventures Ltd. Vrs. GRIDCO & another Respondents In the matter of: An application under S.86 of the Electricity Act, 2003 read with rules and regulations made thereunder. Persons present: -For M/s JSL. Stainless Ltd. : Shri A K Das, Advocate

For CCPPO : Shri P.K. Mohanty, President, Shri Sanjeev Das,

Vice-President & Shri S. Mishra, Jt. Secretary

For Nava Bharat Ventures Ltd. : Shri A.K. Parija, Sr. Advocate, Shri P.P. Mohanty,

Advocate & Shri H.P.D. Bhattamishra, Advocate

For GRIDCO : Shri H. K. Sharma, CMD & Shri Ranjit Das, Sr.

GM (PP)

For DISCOMs : Shri M.K. Das, GM (PT), CSO (WESCO, NESCO

& SOUTHCO)

For State Govt. : Shri Sukant Pradhan, Jt. Secretary, DoE

### ORDER

Date of Hearing: 17.02.2012 Date of Order: 03.04.2012

Since, all the above three cases are similar in nature and issues raised by the petitioners are common, the Commission had clubbed the above three cases for analogous hearing. The Govt. of Odisha and the DISCOMs are impleaded as parties to these cases. The cases were heard on 28.12.2011, 31.01.2012 &17.02.2012.

- 2. The representative of M/s JSL Stainless Ltd. has submitted that, the Commission, in its Order dated 23.11.2010 passed in Case Nos. 117 and 118 of 2010 vide Para. 37 has held that, the revised tariff for surplus power from Captive/Co-generation Plants mentioned in Paras 33 and 34 of the said Order is applicable with effect from 10.11.2010 and will continue till 31.03.2011. The State Govt. in exercise of power u/S 11 of the Electricity Act, 2003, has issued direction vide notification No. 9485 dated 25<sup>th</sup> November, 2011 directing all the Captive Generating Plants in the State to generate power at full exportable capacity by maximizing their power generation and inject the said power so generated to the state Grid to meet the serious deficit of power situation in the State after their captive consumption to enable the State Govt. to tide over the situation.
- 3. He further submitted that, because of hike in coal price and other raw materials, unless the petitioner is compensated, it shall suffer irrespirable financial loss and hardship which can be compensated only by enhancing the CGP price, as fixed by the Commission in its Order dated 23.11.2010 and continuing till now. The price so fixed by the Commission, is to be enhanced in view of the present hike of coal price etc.
- 4. The Learned Counsel on behalf of M/s NBVL submitted that the Commission should taken into account the direction dated 25.11.2011 of State Govt. u/S 11 of Electricity Act, 2003 to all the CGPs to maximize the captive power generation and to inject the same only to the State Grid. He submitted that, the Commission u/S. 11 (2) of the Act,

in order to offset the adverse financial impact on the generating companies, is required to re-fix the power procurement price at the rate minimum of Rs.4.00 per KWH in respect of power being supplied to GRIDCO from its 64 MW Power Plants as the variable cost of the CGP works out to Rs.3.88 paise. On the query made by the Commission about the status of M/s. NBVL 30 MW and 64 MW Plants, the learned counsel submitted that both the 64 MW and 30 MW units of M/s.NBVL are captive generating plants, the same is also admitted by GRIDCO in its reply dated 28.12.2011, wherein it has admitted that the generating units of M/s.NBVL are CGPs and not IPPs. Later in its written submission M/s.NBVL has submitted that since there is no coal linkage of Applicant Company for its 64 MW power plant, it has been purchasing coal though e-auction at higher rate which varies from month to month. He also submitted a calculation sheet of cost of production for November, 2011 to the tune of Rs.4.82 per Kwh comprising of variable cost of Rs.4.02 and fixed cost of Rs.0.80 per Kwh.

5. The representative of CCPPO submitted that the present rate of Rs.2.75 paise/unit up to 10 MW average supplies does not cover the variable cost of power leaving the recovery of fixed cost like interest, depreciation, O&M Expenses, hike of coal price etc. In view of the present notification dated 25.11.2011 of the State Govt. u/S 11 of the Electricity Act, 2003, the Commission may devise a price mechanism which has a fixed component and a variable component with a minimum threshold level of covering variable cost at present price. He prayed the Commission to fix the procurement price at a minimum of Rs.4.00 per unit with an addition of marginal cost of export beyond 40 MW to compensate the fluctuation in the present market price in the coal. He further submitted that the coal linkages are not allotted to all CGPs and where it is allotted sufficient quantity of coal required for the concerned CGP are not being supplied by the coal company. In many cases even if the linkage coal is available it cannot be procured by CGPs due to unavailability of sufficient rakes from railways. Therefore, CGPs are bound to procure coal through e-auction / import at a much higher cost. He submitted that the variable cost of power generation of different CGPs varies from Rs.3.10 to Rs.4.46 per unit at different coal mix and actual unit cost of coal will vary from Rs.2.29 to 3.66. With a backward calculation it would be seen that the given rate of Rs.2.75 tariff, the range of coal cost only varies between Rs.1.42 to Rs.2.04 without taking other variable cost into consideration. Hence, it is

- abundantly clear that the present coal prices in the existing mix of blend can lead to a total variable cost in a range of Rs.3.52 to Rs.4.46.
- 6. Shri Ranjit Das, Sr. GM (PP), GRIDCO has objected to the prayer made by the petitioners in all the above three cases for revision of the CGP price rather on the other hand he submitted that the present price fixed by the Commission is quite reasonable and the submissions made by CGPs regarding use of 100% e-auction coal is not acceptable as it is understood that most of the CGPs are using a certain extent of linkage coal allotted to them. It is found that indigenous coal and imported coal are being used in the ratio of 80:20 respectively. He submitted that a number of CGPs have confirmed GRIDCO regarding the acceptance of the present price fixed by the Commission. He further submitted that, since the DISCOMs would be directly affected by any revision of CGP price, their views should be taken into consideration by the Commission.
- 7. The representative of DISCOMs submitted that the rate of firm power from CGPs may be considered at variable cost of state dedicated Central Thermal Power Stations TTPS or TSTPS, Kanhia plus a reasonable compensation for capacity charges, which should be less than the present highest bulk supply price or the BSP to be determined by the Commission for FY 2012-13. The power injection by CGPs at frequency 50.2 Hz, and above should be treated as free power as a matter of grid discipline. They further submitted that there should be minimum threshold quantity in MW (say 10 MW) specified for acceptance of schedule by SLDC. All CGPs connected with 33 KV network should supply power directly to DISCOMs and those CGPs need not be required to furnish day ahead schedule to SLDC. Presently M/s Deepak Steel and Power Ltd. and M/s Shree Metaliks Ltd. have executed agreement with NESCO and supplying to NESCO at 33 KV network @ Rs. 1.70 per Kwh and M/s Scan Steel Ltd, another CGPs is also supplying power to WESCO @ Rs. 1.50 per Kwh.
- 8. They submitted that the calculation of variable cost furnished by M/s NBVL Ltd. and M/s JSL Stainless Ltd. in their submission are in two different principles and not in line with norms fixed by CERC Terms & Conditions of Tariff for 2009-14. The Commission may determine the CGP price keeping in view the impact on Bulk Supply Price as well as Retail Supply Price of the Consumers of the State. They further submitted that, according to their cost estimation, the estimated cost in two different scenario are less than the present minimum rate of CGP power of Rs. 2.75 per Kwh. From the cost calculation considering 50% linkage coal and 50% e-auction

coal, the per unit variable cost comes to Rs. 1.871 and the fixed cost comes to Rs. 0.60 with a total of Rs. 2.471 per Kwh. Similarly, considering 80% indigenous coal and 20% imported coal, the per unit variable cost comes to Rs. 2.071 and fixed cost comes to Rs. 0.60 with a total of Rs. 2.671 per Kwh. This cost has been calculated as per CERC norms and the data for fixed cost component has been taken from the calculation furnished by M/s Nava Bharat Venture Ltd. Since in both the above cases, the cost of CGP power is less than the present minimum rate of Rs. 2.75 per Kwh, there is no need of further increase of CGP price even if Section-11 has been imposed by the Govt. of Odisha. They prayed not to increase the CGP price further which will have also an adverse impact on BST as well as RST.

9. The representative of Govt. of Odisha has prayed for some time to furnish the written submission on the views of the State Govt. Later the Govt. of Odisha in DoE, vide its letter no. 2268 dated 20.03.2012 has furnished its views on the purchase of CGPs power, which is reproduce below:

"In order to ease the power supply situation that involves the matters of public interest so crucially, the Government, as of now, has been considerate towards the CGPs as these plants extended timely help by injecting their surplus power to the State Grid and accordingly, treat such injections as self-consumption by CGPs themselves so that they do not lose the CGP Status and the consequent benefit of Electricity Duty exemption and also the favorable OERC approved rates from GRIDCO.

Drawal from CGPs is dependent upon several factors like drawal of cheaper hydropower which otherwise is dependent upon vagaries of monsoon, availability of power from the State pool or the Central Pool, availability of coal & its prices, power from IPPs, the price trends and the general trend of overall energy demand etc., for which nothing can be foretold now. However, the Govt. is committed to ensure adequate power supply to the State consumers in promoting socio-economic development and facilitating industrialization of the State.

Therefore, considering the above situation and possible procurement, the Commission may decide the rate of procurement of power from the CGPs. The Govt. may further bank upon the CGPs for support in case the deficit situation continues to prevail during FY 2012-13."

10. The Commission finds that State Govt. in Energy Deptt. had issued direction under Section-11 of the Electricity Act, 2003 vide their notification No- 9485 dated 25.11.2011 as under.

"Whereas due to inadequate rainfall in the southern parts of the State resulting in low reservoir levels at Balimela, Indravati and Upper Kolab, the generation of hydro power is expected to go down by 1600 MU during the water year 2011-12 ending in 30<sup>th</sup> June, 2012.

Whereas this sharp reduction in the availability of hydro power has caused serious deficit situation in the power availability in the State.

Whereas it is felt essential to provide adequate quantity of quality of power to the domestic consumers as well as the general public of the state.

Now, therefore, keeping in view the above exigencies and extraordinary circumstances, the Government in the public interest do hereby direct all the Captive Generation Plants in the State u/s 11 of the Electricity Act, 2003 to generate power at full exportable capacity by maximizing their power generation and inject power so generated to the State Grid after their captive consumption to enable the State Government to tide over the situation.

The power so injected to the State Grid will be considered as captive consumption for the purpose of determining the CGP status of the plant."

11. In addition, the State Govt. in DoE vide letter No.2261 dtd.19.03.2012 while furnishing the suggestions/views on the tariff related issues for the FY 2012-13 has indicated the followings on the issue of exploiting the surplus power from CGPs:

"The Commission may take suitable action by providing competitive prices (tariff) for harnessing surplus power from CGPs within the stipulations of Act and policies. Keeping in view the support provided by the Govt. to the CPPs under the IPRs especially relating to the exemption from payment of electricity duty on their self consumption and also the interest of the DISCOMs.

However considering the exigencies of the situation the State Govt. may invoke the power available under section 11 (1) of the Electricity Act 2003 to provide adequate power supply to the general consumers of the State.

The companies at the time of establishing the CGP are being given Govt. support in a number of aspects under the various IPRs. The most important of such Govt. support is the exemption from payment of electricity duty on their captive consumption. Since the electricity duty which is being exempted is public revenue, the CGP price should not be so high as to overload the consumers in the shape of increase in BSP of GRIDCO. Hence the Commission may fix a tariff for CGP power so that the GRIDCO is not unnecessarily burdened and the effect is not ultimately transferred to the consumers in the form of higher RST."

### **Commission's Observation and Direction**

12. The state is facing deficit in power availability due to low hydro generation on account of hydrology failure during last 3 years. The Commission had decided to exploit the existing capacity of the Captive/Co-generation Plants and utilize their allowable surplus power limiting to maximum 49% of their total generation in a financial year for state consumption. For the purpose the Commission vide its order dated 31.05.2010 in case no 48 & 49 of 2010 has advised all CGPs and GRIDCO to furnish the details of their total generation, consumption by the industries owning the

CGPs and the sale to outside agencies including GRIDCO, so that they can have track of the mandatory self consumption of 51% or more of the total generation. The above stipulation is also reiterated by the Commission in its clarificatory order dated 29.08.2011 in case no 22 of 2011 and another order dated 29.08.2011 in case no 49,50, 52 and 54 of 2011, furnishing requisite month wise cumulative data in a prescribed format for the financial year.

- 13. The Commission observed that the following two issues are relevant here for consideration.
  - (a) Establishing the CGP status of the generating unit owned by the industry and
  - (b) After establishment of the CGP status what should be the reasonable rate of its allowable exportable surplus power to the state grid?

We would like to examine both the issues as under:

#### **Establishing the CGP Status**

- 14. In our earlier order(s), the Commission has categorically stipulated that for the FY 2010-11 onwards "the Owners of CGPs shall supply data regarding its generation, own consumption and consumption by its group companies through Open Access, together called as captive use and the sale of power to the state grid including any bilateral sale/trading, sale through power exchange together called the total sale of power progressively in every month to the State Govt.(EIC) and GRIDCO. The Owner of CGPs shall give a self certification that on annual basis they shall consume not less than 51% of the aggregate electricity generated in its plant. If the State Govt. or GRUIDCO insist upon the Owner of CGPs to supply more electricity to the state grid for public interest, and thereby CGP's total sale (including sale under Open Access) increases more than 49% of its total generation, then the issue to be addressed with mutual satisfaction in the PPA, or special agreement before such supply is effected. The existing PPA is to be suitably amended".
- 15. Now the situation arises that the State Govt. has imposed Sec.11 of the Electricity Act. 2003 and directed all the Captive Generating Plants to generate power at full exportable capacity by maximizing their power generation and inject power so generated to the State Grid after their captive consumption to enable the State Govt. to tide over the situation. The power so injected to the State Grid would be considered as the captive consumption of the Industry owing CGP for the purpose of CGP status of the plant. No limitation of maximum sale upto 49% of the total generation of the CGP

appears to be not specifically mentioned in the State Govt. order. The Commission had advised that if such a situation arises that CGP's total sale likely to be increased of the statutory limit of 49%, the issue should addressed through a special agreement before such supply is effected. It is therefore necessary that the concerned industry owning CGP shall take up with all the stakeholders i.e. GRIDCO, State Govt. and DISCOMs for their commercial treatment of the additional sale of power beyond the statutory limit of 49% and, if necessary, Commission's approval should be taken before effecting such supply.

# **Pricing for Allowable Exportable Surplus Power from CGPs**

16. The Commission in its last CGP pricing order dated 23.11.2010 in case no. 117 & 118 of 2010 had fixed the ceiling price for the surplus power from the Captive/Cogeneration Plants with effect from 10.11.2010 as given in table below:

Supply Quantum per Month	Supplying 100% surplus Firm Power to GRIDCO	Supplying 60% & above surplus Firm Power to GRIDCO and balance export through Open access.
Supply upto 7.3 MU per month (~ 10 MW Avg. and below)	Rs.2.75 per KWh	Rs.2.75 per KWh
Incremental energy above 7.3 MU/month and upto 36 MU/month (~ above 10 MW and upto Avg. 50 MW)	Rs.3.10 per KWh	Rs.3.00 per KWh
Incremental energy beyond 36 MU/month (above ~ 50 MW)	Rs.3.25 per KWh	Rs.3.20 per KWh
Any injection over the implemented schedule at a frequency of 50.20 Hz and above	Free Power to State Grid	Free Power to State Grid
who would supply inadvertent power/ infirm power within the Operating Frequency Band of 49.50 to 50.18 HZ	paid at the pooled cost of State hydel power which is 62.51 Paise/KWh for FY 2010-11	paid at the pooled cost of State hydel power which is 62.51 Paise/KWh for FY 2010-11

17. The Commission, considering the suggestions of the petitioner and the reply of the respondents in the present cases, opines that the industries has been permitted by the State Govt. to set up its own Captive Power Plant specifically for the twin purpose of avoidance of high cost applicable to industrial tariff of DISCOMs as well as basically for the reliability purpose. Industries were allowed to establish CGPs about two times of their average drawl, thus, having an exportable ex-bus surplus capacity of maximum 40 to 45% of their total generation considering the auxiliary consumption of the generator. The Commission is not inclined to go into the nitty-gritty of the

CGP's fuel management & its pricing and procurement details of receipt of fuel through e-auction imported coal. The Commission had fixed the purchase price of GRIDCO from CGPs based on its avoidable cost principle.

18. The Commission has noted with great concern the current status of power availability, given the current hydro situation and the present forecast of deficit in total availability which is seen from the submission of GRIDCO. In the absence of CGP's injection, the overall demand-supply gap may increase. Power sector in the State is now facing a deficit situation which can be minimized if the CGPs inject about 450 to 600 MW power to State Grid if a suitable price is paid to them at this juncture. At the same time, it must also ensure that GRIDCO is not be burdened with liabilities with purchase of power costlier than the power from a thermal power station in Eastern Region.

The weighted average rate of power from Eastern Region central thermal power stations was 268.48 paise per unit in the FY 2010-11 and the same for the first half of the FY 2011-12 was 397.55 p/u. However, for the FY 2012-13 the Commission has estimated the same at 376.32 p/u.

Similarly, the weighted average rate of power from TTPS (NTPC) was 166.64 p/u during the FY 2010-11 and the same for the first half of the FY 2011-12 was 166.87 p/u whereas the Commission has estimated the same at 179.87 p/u for the FY 2012-13.

The weighted average rate of power from OPGC was 159.30 p/u during the FY 2010-11 and the same for the first half of the FY 2011-12 was 166.00 p/u whereas the Commission has estimated the same at 195.15 p/u for the FY 2012-13.

The weighted average rate of power from Central Thermal plus TTPS together was 232.48 p/u during the FY 2010-11 and the same for the first half of the FY 2011-12 was 313.17 p/u whereas the Commission has estimated the same at 311.84 p/u for the FY 2012-13.

The weighted average rate of power from Central Thermal plus TTPS and OPGC together was 215.69 p/u during the FY 2010-11 and the same for the first half of the FY 2011-12 was 280.04 p/u whereas the Commission has estimated the same at 283.49 p/u for the FY 2012-13.

19. The Commission in their original order dtd.14.03.2008 while formulating guidelines for procuring power from the CGP had initially stipulated that such power should be procured through competitive bidding process. But subsequently the Commission

found that the rate quoted in the bidding prices was exorbitantly high ranging from Rs.3.85 to Rs.5.68 per unit. Accordingly while reviewing the rate from time to time the Commission took into account the price prevailing in the power exchange and the UI rates as well the rate at which GRIDCO was purchasing from other different sources to meet the demand supply gap. The Commission has never considered the cost of generation power of the surplus of the CGPs. This was adopted consciously keeping in the opportune cost to GRIDCO and the probable gain the CGPs would have got if they would have sold through UI or power exchange.

- 20. Keeping in view the weighted average rate for the Central Thermal Stations and TTPS at 313.17 p/u paid during 2011-12 upto September, 2012 and the rate of 311.84 p/u approved for 2012-13 the Commission would like to advise GRIDCO and State Govt. to discuss with the CGP owners and work out an agreed rate so that the consumers are not unduly burdened and at the same time as provided u/S.11(2) the adverse financial impact of the directions issued by State Govt. under S.11 of the Electricity Act, 2003 is offset to a reasonable extent in order to incentivise the CGPs to maximize generation to help GRIDCO to meet the power deficit situation.
- 21. Accordingly, the cases are disposed of.

Sd/- Sd/- Sd/
(B.K. Misra) (K.C. Badu) (S. P. Nanda)

Member Member Chairperson