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

Present: Shri B.K. Das, Chairperson Shri K.C. Badu, Member Shri B.K. Misra, Member

Case No. 84/2009

M/s. Auro Ispat (India) Pvt. Ltd Petitioner - Vrs. -

E.E., Athagarh Elect. Division, CESU & another............... Respondents

In the matter of: Application u/s. 57 of the Electricity Act, 2003.

For the Petitioner: Shri Akshaya Kumar Sahani, Authorised Representative for M/s.

Auro Ispat (India) Pvt. Ltd

For the Respondents: Shri B. K. Nayak, Advocate, for E.E., Athagarh, CESU.

Nobody is present on behalf of M/s.OPTCL.

Date of Hearing: 21.09.2010 Date of Order:26.11.2010

ORDER

M/s Auro Ispat (India) Pvt. Ltd. is a consumer bearing consumer No.ICK-139 with a contract demand of 3MVA, 33KV of the licensee-CESU availing power supply from 33/11KV Khuntuni S/s which is 39.2Kms away from feeding 132/33KV grid S/s at Nuapatna. Due to low voltage at Khuntuni s/s and /or tripping of the Nuapatna-Khuntuni 33kV line on various occasions, the production of the unit is not only hampered but also there is every possibility of damage to the costly machinaries for which the unit was shut down and hence financial loss is caused to the petitioner's unit. Though on many occasions such fact was intimated to the authorities of the licensee, no one was paying any heed to it. It was specifically found that the voltage in the supply line remains 22 to 25 KV in peak hours and 26 to 29KV at consumer premises in day time instead of 33KV. Besides these the power supply was disrupted from the supply line without

any prior intimation to the petitioner. Regarding low voltage problem of the petitioner thelicensee-CESU had taken up with the AGM, EHT (O&M), OPTCL vide its letter No. 3819 dated 08.07.08. Even after a joint verification was made by the concerned authorities of the licensee OPTCL and the representative of the petitioner on 04.04.2007, there was no substantial improvement of voltage and the problem is still continuing.

2. Being aggrieved by the inaction of the licensee, the petitioner had filed a Consumer Complaint Case bearing No. 44/2008, which was disposed of on 16.7.08 by GRF, Cuttack with the following observation:-

"It is the duly of the licensee as well as that of the consumer to take necessary steps for maintaining supply at required voltage. Considering the step taken by Opp. Party for supply of power at required voltage and the reasons set froth by the Opp. Party for non-supply of power at required voltage, this Forum is not inclined to award any compensation. However, the Complainant is directed to take necessary steps as advised by Opp. Party in letter No. 3087 dtd. 04.05.2007 and the Opp. Party is also directed to take steps for supply of power at required voltage. Hence it is ordered that the Complainant and the Opp. Party shall take necessary steps as discussed above for supply of power at required voltage"

3. As the GRF, Cuttack did not award any compensation towards loss of the petitioner's unit, the petitioner moved to the Ombudsman-I, Bhubaneswar against the order of the GRF, Cuttack. The Ombudsman-I had disposed of the said C R. Case No. OM(I)-11/09 on 20.04.2009 with as follows:-

been received either from GRIDCO or from OPTCL yet, the matter may be referred to the OERC for necessary action. In view of the above submissions of both the parties, I feel it appropriate to direct the petitioner to agitate the matter of grant of compensation as well as eradication of low voltage problem before the OERC, Bhubaneswar."

Hence, the petitioner has filed this case before the OERC u/S. 57 & 42 (7) of the Electricity Act, 2003 for implementation of the orders of the Ombudsman-I as well as the GRF, Cuttack and so also for compensation for loss caused due to low voltage.

4. The petitioner also stated that the 3rd 40 MVA transformer at Nuapatna Grid s/s of M/s.OPTCL, recently has been commissioned i.e., on 13.08.2010 and the voltage has improved to some extent but not fully. The installation of 10 MVR Capacitor Bank at Nuaptna Grid S/s is required for maintaining voltage profile within the statutory limits. But the same has not yet been commissioned by the respondents. OPTCL is demanding Rs.10.00 lakhs per MW from new connections for system improvement, although responsibility lies jointly between OPTCL and distribution licensee for proper voltage regulation at Khuntuni 33 kV s/s of CESU and power supply to the unit of the petitioner with proper voltage.

The petitioner's unit has been executed agreement with the licensee for 33KV supply and if the licensee failed to supply adequate voltage, and maintain standard as per OERC Regulations is liable to pay compensation as claimed by the petitioner, which may kindly be decided u/s 57(2) of the Electricity Act,2003.

5. Shri Nayak, learned counsel for the licensee-CESU stated that the petitioner is availing power supply at its Khuntuni s/s from Nuapatna 132/33 KV Grid S/s. The input voltage at its Khuntuni 33/11kv S/s remains low, thus voltage at consumer premises remains low. One of the main reasons of low voltage was

attributed to over loading of the then existing 132/33kv transformers at OPTCL GRID S/s. In order to improve the voltage, the 12.5MVA transformer has been replaced by a new 40MVA transformer and the same was installed by OPTCL on 13.08.2010. After installation of the said transformer the voltage has been substantially improved. The voltage available at the petitioner's unit is now within the permissible limit.

CESU, on its part has carried out re-jumpering work of all the 33 cut points of 33 KV lines from Nuapatna GRID S/s to Khuntuni S/s. The defunct 33KV lines from a midpoint (T) joint leading to Sakti Sugar has been isolated from the cut point. The 33KV Khuntuni Isolator at 33/11KV S/s Athagarh has been repaired and made OK. In addition to the above measure, the total 33KV line, 15 Kms conductors has been augmented by CESU from 55 MM² to 100MM² from Athagarh (a mid 33/11 kv S/s between Nuapatna to Khuntuni) for improvement of the voltage in the area of supply.

6. Further, CESU has examined the possibilities of extending second source of 33 kv supply from Choudwar (132/33) GRID S/s via Chhatisa (33/kv) primery S/s to Khuntuni S/s; so that the reliability of power supply at Khuntuni improves. For the purpose the augmentation of conductor's size from 55 MM² to 150MM² has been completed from Choudwar Grid to Chhatisa 33/11KV S/s and from Chhatisa to Kuspangi four poles structure. Construction of 33KV line from Kuspangi four pole structure to Khuntuni is under progress. After completion of the above line, the unit may also avail power supply from Choudwar Grid with adequate voltage.

A single line diagram indicating the action initiated is enclosed.

7. Shri Nayak also stated that the petitioner has made an application for enhancement of additional load of 1.5MVA on existing arrangement i.e., from existing 3 MVA to 4.5 MVA. The said application clearly indicates that the petitioner is availing power supply regularly without any interruption for which, application has been filed for enhancement of the load. In the

meantime the licensee vide its communication dated 7.5.2008 has submitted its proposal to OPTCL for construction of a new 132/33KV Grid S/s at Khuntuni for improvement of voltage system in the areas as the existing arrangement will not be able to meet the future requirement. One M/s KVK Nilachal Pvt. Ltd. has made an application for supply of power to its proposed unit at Khandery for availing 2MVA load at 33KV as the existing supply system is not feasible to provide supply to the prospective consumer like M/s KVK Nilachal Pvt. Ltd.

- 8. The licensee is availing power supply from OPTCL system to provide adequate voltage to the consumers in its area of supply, which is received at the 33 kV bus of its Grid S/S within the permissible limit of variation. As per guaranteed performance Clause No. 2.1 of OERC in case of high voltage. The permissible limit of voltage variation +6% and -9%. From the above figure it was found that the licensee-CESU has maintained the existing system voltage at the point of commencement of supply to the petitioner within limit. All the above facts was admitted during hearing of CR Case No. OM(I)-11/2009 before the Ombudsman-I, Bhubaneswar, that unless and until OPTCL take appropriate and adequate steps to maintain required voltage at the outgoing bus of its Grid S/s, the voltage problem in the petitioner's area can not be eradicated upto the satisfaction of the other consumers including the petitioner. The Ombudsman-I, Bhubaneswar had observed that as the license has already taken steps to improve the voltage, the licensee comes within the paragraph 8(2) of exemption as provided in the Regulation; for which the petitioner is not entitled to get any compensation. In such view of the matter, the licensee prayed the Commission to direct OPTCL to provide adequate supply to avoid low voltage problem and also prayed to dismiss the petition as it has no merit.
- 9. M/s OPTCL in its counter reply submitted that the low voltage was due to the inadequate installed capacity at 132/3KV Nuapatna Grid S/s, which is loaded upto 28.0MW (96% of its capacity) during peak hours. As the one no. 12.5

MVA transformer has been upgraded with 40 MVA transformer (present transformation capacity is 1x40 +1x20 MVA, the transformer overloading problem has been solved. From the hourly voltage profile recorded at Nuapatna Grid S/s during peak load hours, it is an established fact that the 33KV side voltage is regulated between 30.5KV to 31.5KV. In HV (HT) category as per I.E. Rules, a deviation of +6% (i.e., 34.98KV) to -9% (i.e., 30.03KV) is permissible. The regulated voltage between 30.5KV to 31.5KV at the outgoing bus of the Nuapatna Grid S/s within the permissible limit. OPTCL has also planned in the 5 year Revised Business Plan to provide a 3rd transformer (40MVA) at Nuapatna Grid S/s during FY 2009-10. For the said purpose OPTCL has already received the bid documents from the manufacturers which are in process of evaluation and it would be finalized within 2 months. For the construction of additional bays on turn-key basis, the price bids have been opened and evaluation is in process. M/s PRDC, Bangalore in their report on the Reactive Energy Pricing have recommended for installation of 10 MVAR capacitor bank at Nuapatna Grid S/s for maintaining voltage profile within statutory limits. As recommendation of M/s PRDC, the procurement of capacitor banks will be made by OPTCL which has been incorporated in the proposal of Revised Business Plan under CAPEX Plan for O&M Wing.

- 10. Further, G.M., EHT (O&M), Circle, OPTCL, Cuttack had requested CESU vide letter No. 811 dated 21.05.2009 to construct 33KV line from 33/11KV S/s at Narangabasta to Kapursingh which is about 3 Km for establishing link between Choudwar and Nuapatna Grid S/s. This would facilitate diversion of 5MW load from Nuapatna Grid S/s to Choudwar Grid S/s through existing 33KV Athagarh feeder emanating from Choudwar Grid S/s till augmentation of transformer capacity at Nuapatna Grid S/s.
- 11. Regarding the frequent tripping of 33 KV Khuntuni feeder from Nuapatna 132/33 KV S/S, M/s OPTCL has intimated that the cause of tripping is fully attributable to the fault which occurs in CESU distribution system. There is no

protection (if available not functional) system in CESU's 33/11 KV Khuntuni S/S and, therefore, even a fault occurs in the 33 KV line or even in the 11 KV system of CESU, the fault current transmits to the OPTCL's Grid S/S and the fault is cleared only at OPTCL's Nuapatna grid S/S. Unless CESU rectifies its own protection system and clears its 11 KV fault at the subject feeder itself, the supply reliability of the petitioner or ay of its industrial consumer can not be improved upon.

- 12. After hearing the parties and perusal of the submissions made by them, we opine that two main issues i.e., (i) problem of low voltage and (ii) frequent interruptions are required to be addressed by the licensee. We would also like to make it clear that as the petitioner is the consumer of DISCOM, it is the primary duties of the DISCOM to solve the consumer grievance for proper and reliable power supply as well as consider the consumer's application of load enhancement. If any action or support is needed from TRANSCO (i.e. M/s OPTCL), it is the responsibility of DISCOM (CESU) to co-ordinate with the TRANSCO. In no case DISCOM can not absolve its primary responsibility on the plea that unreliable and low voltage problem are on account of TRANSCO.
- 13. In regard to the problem of low voltage, Commission noted with satisfaction that M/s OPTCL has since upgraded the transformation capacity from (1x12.5+1x20) = 32.5 MVA to (1x40+1x20) = 60 MVA and CESU on its part has taken up the maintenance work of 33 KV line from Nuapatna to Khuntuni. We direct that OPTCL may take expeditious action to install a 3rd transformer of 40 MVA capacity and for which necessary bay extension be made at Nuapatna Grid S/s. OPTCL may also install 10 MVAR 33 KV switchable capacitor bank at Nuapatna Grid S/s.

CESU may monitor its receiving end voltage at Khuntuni 3/11 KV S/s and the voltage at the consumer premises. M/s Auro Ispat/ CESU may also check the healthiness of 1.5 Km. 33 KV line between Khuntuni to M/s Auro Ispat.

- 14. We also direct CESU that 33 KV line from Choudwar Grid S/s should be extended upto Khuntuni 33/11 S/s, for which pending construction of 33KV line from Kusupangi 4 pole structure to Khuntuni should be completed at the earliest. This arrangement will increase the reliability of power supply as Khuntuni will have two sources of feeding points.
- 15. On the issue of frequent interruption and improvement of reliable supply, CESU should provide breakers/ proper protection arrangement at individual 11 kV feeder or provide group protection arrangement for all its 11 kV feeders emanating from its 33/11 kV S/s to clear the faults in 11 KV feeders. In absence of the above protection arrangement, CESU should ensure that breakers at incoming 33kV feeders should positively be in operative condition. In no circumstances, the fault in DISCOM's 11kV system should be passed on to OPTCL system. All the above works should be completed within 31.12.2010.
- 16. Regarding the issue of application of enhancement of contract demand of the petitioner, DISCOM may take its own decision depending upon the system condition. At no case the consumer connected at 33 KV at DISCOM's substation be advised to approach OPTCL or GRIDCO for approval of increase of contract demand. Necessary coordination works required, if any, be done by CESU itself.
- 17. Accordingly, the case is disposed of.

Sd/(B.K. Misra)
(K. C. Badu)
Member
Member
Sd/(B.K. Das)
Chairperson