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

Present: Shri B.K. Das, Chairperson

Shri S.K. Jena, Member Shri K.C. Badu, Member

Case No.04/2008

In the matter of: Investment proposal to be taken up from the fiscal year

2007-08 for construction of 132 kV transmission lines & sub-stations on availing loan assistance from REC/PFC.

M/s.Orissa Power Transmission Corporation Ltd. (OPTCL) Applicant

For the Applicant: Mr. D.K. Choudhury, Sr. GM(TP &Const), OPTCL

Date of Hearing: 04.03.2008

Date of Order: 04.04.2008

As per its license condition No.10 read with 23.1 the OPTCL has submitted an application for approval of investment proposals

- (a) Construction of 56.073 km 132 kV S.C. Transmission line on DC tower from 220/132 kV Paradeep Grid S/S to 132/33 kV Jagatsingpur Grid S/S with 132 kV feeder bay extension at both ends at an estimated cost of Rs.18.197 cr. (Rs.14.68 cr. for the transmission line and Rs.3.5 cr. for the bay extensions) with funding from own resources and from financial institutions. The total estimated cost of this project as well as the phasing of expenditure does not match with the same filed in the ARR Application for FY 2008-09. The total estimated cost of the project as per ARR comes at Rs. 12.04 against Rs. 18.197 in the investment proposal to be spent in phases i.e. Rs.14.0 crs and Rs. 4.2 crs in FY 2008-09 and 2009-10 respectively.
- (b) Construction of new 132/33 kV S/S at Purusottampur along with associated 2.5 Km. 132 kV DC LILO arrangement from existing 132 kV Aska-Chhatrapur line at an estimated cost of Rs.15.992 cr. (Rs.15.02 cr.

- for the sub-station and Rs.0.97 cr. for the LILO arrangement and 2.5 km line) with funding from own resources and from financial institutions. This project has not been proposed in the ARR for FY 2008-09.
- (c) Construction of 10.42km 132 kV DC line from 220/132 kV Bidanasi S/S to 132/33 kV Cuttack S/S at an estimated cost of Rs.12.245 cr. with funding from own resources and from financial institutions.

The total estimated cost of the project as per ARR for FY 2008-09 comes at Rs. 11.55 against Rs. 12.25 in the investment proposal to be spent in FY 2008-09 whereas as per the ARR, the amount of Rs.11.55 is to be spent in phases i.e. Rs.8.00 crs and Rs. 3.55 crs in FY 2007-08 and 2008-09 respectively.

The total investment has been estimated to be Rs.46.434 cr.

- 2. As per the Licence Condition, the Licensee is required to satisfy to the Commission (i) about need of such investment; (ii) that it has examined the economic, technical system and environmental aspects of all alternatives.
- 3. In response to the query, it is clarified by OPTCL that the cost estimate indicated in the ARR are tentative and the cost estimate for new 132/33 KV S/S at Purusottampur came up at the last moment and hence has not been incorporated in the ARR for FY 2008-09.
- 4. On examination of the application of OPTCL, prima-facie it is found that the investments have been justified for improvement of power supply system, reducing loading on certain line section of OPTCL's network and reducing the overall/ transmission losses. OPTCL has made the system study with the existing arrangement and the proposed arrangement for three investment proposals.
- 5. The present supply to the Jagatsinghpur Grid Sub-station is through one no. of 132 KV SC line from Mancheswar Grid Sub-station to Jagatsinghpur Grid via Cuttack Grid Sub-station with a flow of around 60-70 MW in peak hours. This 132 KV line is going to be tapped through LILO arrangement to feed Phulnakhara Grid Sub-station. The power to the Gorakhnath 132 KV traction sub-station shall also be extended from Jagatsinghpur Grid. Hence, this load growth requires that additional source of power supply to Jagatsinghpur Grid is a necessity. OPTCL has estimated that around 30 MW power shall flow from Praradeep Grid to Jagatsinghpur Grid sub-station through the investment proposal no. 1 stated above.

- 6. The present supply to Purusottampur area is the 43 km 33KV network from 132/33 KV Chhatrapur Grid sub-station. This is causing poor quality of supply and high losses in the system. To minimize this, the investment proposal at (b) has been made.
- 7. The present power supply system of the Cuttack 132 KV Grid sub-station is the 58 km 132 KV SC line from the 220/132 KV sub-station Bidanasi via Chandaka S/S, Mancheswar S/S reserve bus. The Cuttack Grid is connected to Jagatsinghpur Grid through a 132 KV SC line of 35.11 km. The Mancheswar-Cuttack line is also going to be tapped for supplying to the Phulnakhara and Bargarh Grid S/S. The existing Mancheswar-Cuttack line with peak load of around 70 MW is of ACSR Panther Conductor which may not carry more load if the load growth on Cuttack Grid S/S and feeding to Phulnakhara/Badagada Grid S/S take place which is expected to be around 30 MW. Hence, it is desirable that an additional line directly from Bidanasi S/S to Cuttack Grid is to be drawn. Hence, OPTCL has made investment proposal at (c).
- 8. Mr. D.K. Choudhury, Sr. GM (TP & Const), OPTCL is present. Heard the petitioner, perused the petition and DPRs.
- 9. Primafacie it appears that the investment proposals submitted by OPTCL are meant for improvement of transmission system and there is need for such investment. The petition is admitted.
- 10. From the project implementation schedules (Bar chart) as submitted in DPRs, the projects have started from January, 2008 and are expected to be completed by June, 2009, September, 2009 and March, 2009 respectively.
- 11. Clearance of forest and environmental are not required for these proposed projects as stated by OPTCL. Environmental Impact Assessment (EIA) Study for three projects have also been submitted by the applicant.
- 12. The applicant stated that it has adopted the procurement procedure through National Competitive Bidding, Single Package and Turn Key basis for the three individual proposals.
- 13. As regard to delay in execution/implementation of the project, OPTCL stated that the projects proposal/estimate is to be approved by the Board and in case of any project, the cost of which exceeds Rs.5 crores is to be submitted to the Govt. of Orissa for approval as per their circular issued by Energy Department and thereafter, the tendering part can be started.

- 14. The Commission observed that the approval by OERC and then submitting the proposal to Govt. do not serve any purpose except causing delay on implementation of the projects with associated cost and time overrun which should be avoided at any cost. This practice is not conducive for integrated growth of power transmission and distribution in the State. Therefore, the Commission directed that after approval by the Commission, it is no more required to be sent to the Govt. for further approval and the work can be started immediately after approval of the Commission. The Commission also observed that since the projects are awarded on turn-key basis, different activities such as procurement of material, day to day execution etc. need be vigorously monitored by OPTCL. The contractor must complete the entire job as per the specification and handover to OPTCL.
- 15. With these observations, stipulations and directions mentioned above, the Commission approves the following investment proposals of OPTCL: -

Estimated Cost

Items of Transmission reinforcement

| | | (Rs. Crore) |
|-------|---|--------------|
| (i) | 132 KV S/C line on D/C tower from Paradeep grid S/S to Jagatsinghpur grid S/S with 132 KV | 18.197 |
| (ii) | feeder bay extension at both ends. 132/33 KV S/S at Purushottampur along with associated 2.5 KM of 132 KV D/C LILO arrangement | 15.992 |
| (iii) | from 132 KV Aska-Chatrapur line. 132 KV D/C line from 220/132 KV Bidanasi S/S to 132/33 KV Cuttack S/S | 12.245 |
| | Total: | 46.434 Crore |

Accordingly the case is disposed of.