

**MINUTES OF THE SPECIAL MEETING WITH RAILWAYS AND UTILITIES SUPPLYING POWER  
TO RAILWAYS ON 01.12.2010 AT ERPC SECRETARIAT, KOLKATA**

*List of participants is at Annexure-I.*

*Sh. A. K. Rampal, Member Secretary, ERPC welcomed the participants to this special meeting. He informed that frequent power supply interruptions and other problems faced by Eastern and South Eastern Railway were deliberated in various OCC meetings of ERPC. In the recently concluded 56<sup>th</sup> meeting of OCC on 23.11.10, members opined for arranging a separate meeting among Eastern Railway, South Eastern Railway and various power supply providers to railways. Accordingly, this meeting was convened to sort out the issues.*

*Thereafter, he requested Sh. A. K. Bandyopadhyaya, Superintending Engineer (Operation), ERPC to take the agenda items.*

*Agenda items were then taken up by Sh. A. K. Bandyopadhyaya.*

**ITEM NO. 1: FREQUENT POWER INTERRUPTIONS FACED BY EASTERN RAILWAY AT  
JAMTARA AND SANKARPUR TSS OF JSEB - EASTERN RAILWAY**

Eastern Railway had informed about frequent power interruptions at Sankarpur and Jamtara substation of JSEB simultaneously causing disruptions in train service between Chittaranjan and Jha-Jha station of Eastern Railway. This has been further aggravated as 132 kV power supply has not been provided by BSEB to Jha-Jha TSS, which is commissioned since long.

Regarding 132 kV power supply from BSEB to Jhajha TSS, BSEB informed that the construction of 132 kV Jamui-Jhajha transmission is under progress. The work is placed with M/s Magadh Micro towers Pvt. Ltd and is likely to be completed by January 2011.

Jamtara s/stn. of JSEB is only connected to Maithon(DVC) via 132 kV S/C at one end and with Sultangung/Deoghar of Bihar at other end. However, normally the supply is availed from Maithon DVC. Thus, the supply at Jamtara(JSEB) is fully dependent on the power source either from DVC or BSEB. Reliability of supply from Jamtara, therefore, can only be ensured through proper line maintenance, healthiness of various equipments besides availability of power from the neighbouring system. The load fed from Jamtara would gradually increase in course of time and overloading of 132 kV S/C Maithon -Jamtara line may not be avoided at a later date when DVC might put restriction on drawal of Jamtara. Further, closing of the loop i.e. Maithon (DVC) - Jamtara - Deoghar/Sultanganj might lead to uncontrolled flow in DVC / BSEB 132 kV system.

Under the circumstances, it is felt that in order to minimize such interruption, Jamtara (JSEB) needs one or more inter-connection from its own adjoining s/stn. It is therefore proposed that a new alternative source from JSEB may be planned in order to improve the reliability of supply to various traction stations fed from Jamtara.

Members may discuss.

### **Deliberation in the meeting**

*Regarding status of 132 kV Jamui-Jhajha transmission lines line, BSEB confirmed that construction work of the line was under progress and the work would be completed by January 2011. 132 kV Jamui s/s is presently connected with Lakhisarai s/s and in future, it would also have connectivity from Biharshariff end.*

*JSEB informed that 100 MVA 220/132 kV transformers was procured for installing at Lalmatia s/s. After installation of the same, additional supply from Lalmatia side could be extended to Deogarh via Lalmatia-Dumka-Deogarh line. ERLDC requested JSEB to explore feeding Sankarpur load from Deogarh side and Jamtara load from Maithon side.*

*After deliberations, it was decided to refer the issue to the ensuing TCC meeting.*

### **ITEM NO. 2:-POWER SUPPLY INTERRUPTION FROM OPTCL AT JALESWAR TSS --SE RAILWAY**

South Eastern Railway is facing repeated and prolonged power failure from OPTCL supply points particularly at Jaleswar. On 03.11.10, traction power supply has failed at Jaleswar TSS from 14:03 hrs. In absence of Jaleswar feed, power supplies from adjacent substations are being extended over the failed substation. This is causing problem of low voltage in Jaleswar to Bhadrak section and has severe effect on the train moment with stalling of trains in section.

Members may discuss.

### **Deliberation in the meeting**

*OPTCL informed that the above instance on 03.11.10 happened due to insulator failure of 20 MVA transformer -II (132 kV side), which damaged 132 kV main & reserve bus (section-II) along with tripping of 132 kV Balasore-Jaleswar line. Subsequently, transformer-I & II were charged through section bus-I and Jaleswar TSS availed power supply from Balasore end, which caused low voltage.*

*As remedial measures, insulators of 37 towers were changed and insulators of 35 towers in between location 35 to 80 would be changed by end of January 2011. This would improve the power supply position/stability in the corridor.*

### **ITEM NO. 3:- VOLTAGE IMPROVEMENT AT GRID SUB-STATION MANIQUE --JSEB**

Voltage of DVC system at Manique G/S/S has been observed to be very low on most of the time. Railway authorities are always complaining that they face a lot of difficulties due to this. It is earnest request of JSEB that the problem should be addressed at the earliest. DVC may be requested to submit a voltage improvement plan and accordingly immediate action on the plan so that problem faced by SE Railway may be minimized / addressed.

Members may discuss.

#### **Deliberation in the meeting**

*As DVC was not available, it was decided to discuss it in ensuing TCC meeting.*

### **ITEM NO. 4:- ARRANGEMENT OF ALTERNATIVE POWER SUPPLY TO KENDPOSI AND NOAMUNDI GRID SUB- STATION -- JSEB**

132/33 KV Kendposi grid supplies power to Railway on 132kV, ACC Jhinkpani on 33 KV and local supply to the adjoining trial area. This grid is further utilized to feed power to 132/33KV Noamundi grid which feeds power to some of the most important iron mines of Central Govt. and TISCO along with local supply to the adjoining area.

Kendposi grid is connected with JSEB system through only one source which is 132KV S/C Rajkharsawan -Kendposi line. The station is also connected to Joda of OPTCL through 132 kV S/C line. However, with increase in demand at Joda s/stn. of Orissa, there is a general reluctance in closing this line to avoid overloading of 220 /132 kV transformers of Joda. As a result, at the time of outage of 132kV Rajkharsawan -Kendposi lines there is inordinate delay in getting power from Joda (OPTCL) which badly affects the train services, ACC Cement factory and the mining activity of Cental Govt. and TISCO at Gua and Noamundi respectively.

It is therefore JSEB's earnest request to keep 132kV Joda-Kendposi line charged from Joda and let Kendposi grid draw power immediately as per availability in the even of failure of 132kV RKSJN-Kendposi Tr. line without any delay.

Further, it is also proposed by ERLDC that an alternative 132 kV feed to Kendposi s/stn. may be considered either from the proposed Chaibasa or from existing Baripada 132 kV s/stn.

Members may discuss.

#### **Deliberation in the meeting**

*Regarding supply of power to Kendiposi from Joda end, OPTCL informed that existing auto-transformers at Joda substation were already overloaded. It was also*

*informed that after the installation of third auto-transformer at Joda, which would be available within a year, Joda could extend power to Kendposi.*

*After deliberation, it was decided to discuss the issue again in TCC meeting.*

**ITEM NO. 5:- PROPOSAL FOR STRENGTHENING OF 132 KV GARWA S/STNS OF JSEB --- ERLDC**

Garwa S/Stn. of JSEB is only connected to BSEB Sonenagar at one end and with Rihand S/Stn. of UP at the other end. With increased load at Garwa as well as at Sonenagar, presently the feed at Garwa can not be met from Sonenagar source of BSEB as it in turn overloads the Gaya - Sonenagar 132 kV section of BSEB. The present arrangement of availing supply at Garwa is from Rihand S/Stn. of UP via 132 kV Rihand - Garwa S/Stn. Thus, the load fed from Garwa is dependent only on Rihand. Equivalent 40 MW of Garwa load is scheduled at Pusauli to be wheeled back at Rihand through Northern Regional system applying NR loss. Such arrangement was considered as an interim one till strengthening of supply at Garwa is made through alternate feed.

Proposal of 220 kv S/Stn. of Sonenagar BSEB was deliberated in ERPC forum to improve the reliability of supply to Sonenagar / Garwa area. It is therefore proposed that 220 kV S/stn. at Sonenagar along with its associated transmission system be expedited in order to improve power supply at Sonanagar/ Garwa complex.

**Deliberation in the meeting**

*ERLDC expressed its concern as Garwa is virtually fed from single source. Alternate source for Sonenagar was also discussed. BSEB informed that the construction of 132 kV Dehri-Sonenagar was under advanced stage of completion and would come by February 2011.*

**ITEM NO. 6: ADDITIONAL AGENDA SUBMITTED BY SOUTH EASTERN RAILWAY**

**i. Power Supply interruption**

Power supply failure in OPTCL, JSEB & WBSEDCL fed traction sub stations are as under:

Name of SEB	2009-10		2010-11 (April to October, 10)	
	No. of cases	Duration in Hrs	No. of cases	Duration in Hrs
OPTCL	364	498	170	404
JSEB	386	164	345	241
WBSEDCL	58	67	38	50

Interruption to traction power supply causes serious repercussion to passenger and freight traffic. Further, 2 to 3 traction sub-station failed simultaneously, causing total supply failure had contributed in deteriorating the punctuality of mail, express trains. Being a vital issue, it was discussed in the several meetings with OPTCL and JSEB several correspondences have been made, but no fruitful results have been achieved.

### **Deliberation in the meeting**

*The details of power supply failure furnished by railways were reviewed and concerned utilities were requested to analyze and take remedial measures. WBSETCL asserted that power supply failure problems be taken up first with local power supply authorities and ensured all helps in this regard.*

*In this regard, WBSETCL pointed out that one circuit of 132 kV Medinipur-Hizli was out since July'10 due to conductor snapping and restoration work could not be taken up due to non-cooperation from Railway authorities. Railway authorities were requested to allow the restoration of the line at the earliest. Railways agreed to settle the issue at the earliest.*

*OPTCL informed that 132/25 kV substation at Rourkela is a very old traction substation. As 25 kV is not a standard voltage for OPTCL, it is difficult to take up maintenance of 25 kV equipment installed there.*

*OPTCL also intimated that Bamra (132/25 kV) and Chandiposh (220/25 kV) are connected in "T" arrangements from 132 kV Sambhalpur-Rajganjpur-Rourkela and 220 kV Rengali-Tarkera lines respectively. Bhalutala (132/25 kV) is also in "T" arrangement from 132 kV Joda-Barjamunda-Rourkela line. To minimize the interruption due to faults occurring in inaccessible forest areas, the line has been isolated from Joda side and is being fed from Rourkela grid end. OPTCL stressed the need for converting these "T" arrangements to "LILO" for reliability of supply.*

*Railways were requested to explore converting these "T" arrangements to "LILO" for better reliability of supply.*

### **ii. Provision of 132kV transmission line and 132kV bay arrangement at Grid sub-station Joda for proposed 132kV TSS Banspani.**

South Eastern Railway had already deposited Rs.6,918 Crore for construction of 132kV transmission line and 132KV bay extension alongwith associated works at Grid sub-station at Joda to extend 132kV power supply for new 132KV/25Kv Traction sub-station at Banspani. OPTCL have given target for completion of entire work as 31.1.2009.

In this regard sever D.O. from CEE,GM nd even Addl. Member (Electrical) Railway Board to CMD/OPTCL, Commissioner-cum-secretary, Department of Energy, Govt of Orissa have been issued requesting for early completion of work.

#### **Deliberation in the meeting**

*OPTCL informed that the bay extension work at Joda grid substation was under progress. All the column erection was completed and the existing 33 kV line to Tensa of WESCO was to be dismantled, as it was fouling with the alignment. This work would take some time. Regarding, 132 kV lines, out of 17 towers, 14 was completed and stringing work would start shortly. The entire work would be completed by end of January 2011.*

*OPTCL was requested to submit the status in the subsequent OCC meeting.*

#### **iii. Power supply arrangement at Railway owned traction sub-station Bandamunda near Rourkela in Chakradharpur division.**

S.E Railway is planning to construct 220kV /25kV Railway owned traction sub-station at Bandamunda to cope up the load of critical location from where four direction Railway traffic is being operated. Several correspondences have already been made to convey consent of availability of power in 220kV for Railway traction sub-station Bandamunda from 220kV Rourkela -Bisra PGCIL tie line through Loop in Loop out arrangement. But till date no communication has yet been received from OPTCL.

#### **Deliberation in the meeting**

*OPTCL expressed its agreement for the LILO and informed that they would approach Powergrid for providing LILO arrangement on 220 kV Bisra-Tarkera line, as Bisra s/s is owned by Powergrid.*

#### **iv. Re-Commissioning of Rourkela -Goelkera 132kV tie line**

The existing tie line between Goelkera- Rourkela is under shut down since long. In case of power supply interrupted from Chandil, there is no alternative power supply for Rajkharswan complex, which is feeding 4 adjacent grid sub-stations at Rajkharswan, Chakradharpur, Goelkera and Kendposi. Re-commissioning of the tie line will facilitate availability of power supply through GRIDCO network at the time of crisis or vice- versa.

#### **Deliberation in the meeting**

*OPTCL informed that it was not possible to commission the line from Rourkela grid side, since building had come up under the lines. It was decided that concerned utilities might explore a second feed for Goelkara substation.*

#### **v. Power supply arrangement at proposed Traction sub-station Tamluk.**

WBSEB authority agreed to arrange power supply from existing TMZ grid sub-station to proposed Railway owned 132/25 KV traction sub-station at Tamluk. Accordingly, submitted a total estimate of Rs.256.01 lakhs for execution of i) construction of 132KV bay at Tamluk traction sub- station ii) construction of 132KV SC line from WBSEB's TMZ sub -station to proposed Railway'S TMZ TSS iii) Construction of 132 kV terminal arrangement at proposed TMZ TSS on behalf of Railway. SE Railway has deposited to the tune of Rs.256.01 Lakhs vide Ch. No. 415903 dt 21.3.2006 and Rs. 20 lakhs on 22.6.09 for execution of transmission line and bay extension for Tamluk TSS.

Though a long period has been elapsed the TSS could not be commissioned due to non-availability of 132kV power supply. WBSEDCL is therefore, requested to execute the said work expeditiously for commissioning the sub-station Tamluk.

#### **Deliberation in the meeting**

*WBSETCL informed that right of way (ROW) problem for a span of 1.8 km is delaying the completion of the above transmission line.*

#### **vi. Billing disputes of different WBSRDCL fed traction point of supply.**

WBSEDCL is preferring energy bill on the basis of MRI chart, but the recorded demand during joint meter reading differs with MRI reading at all the traction sub-stations. The said matter was also discussed several times in the monthly meeting. But the same problems of mismatch of reading exist in energy bills. In this regard, Railway representative interacted with SE (Comm)/WBSEDCL with necessary document. But the billing disputes are not been settled.

WBSEDCL is requested to look into the matter and take appropriate action to arrange refund / adjustment of excess amount realized and also arrange MRI reading during joint meter reading to avoid billing disputes at different traction point of supply.

#### **Deliberation in the meeting**

*Railways were requested to first take up the issue with WBSEDCL and if not resolved, then could take up the issue.*

*Meeting ended with thanks to the chair.*

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