

EASTERN REGIONAL POWER COMMITTEE
14, GOLF CLUB ROAD, TOLLYGUNGE
KOLKATA-700033

**MINUTES OF THE 32nd OCC MEETING HELD AT ERPC, KOLKATA ON 12.11.2008
(WEDNESDAY) AT 11:00 HRS**

List of participants is enclosed in Annexure-I.

Shri R.K.Grover, Member Secretary, ERPC welcomed the delegates in the 32nd OCC meeting, While summarizing the power position of the region he mentioned that grid operation in October,08 remained comfortable, demand in October was less as compared to the previous month (September,08). He expressed concern over loss of generation (NTPC stations in particular) due to coal shortage in the Eastern Region & enquired the present power supply position in the different power stations.

Thereafter, he requested Shri S. N. Kayal, SE (operation) to take up the agenda points for discussion.

ITEM NO. 1 CONFIRMATION OF THE MINUTES OF THE 31ST OCC MEETING OF ERPC HELD AT HOTEL PATLIPUTRA ASHOK, BEER CHAND PATEL PATH, PATNA-1 ON 17.10.2008

The minutes were circulated vide letter no. ERPC / SE (OPRN)/ OPERATION/2008/4180-4214 dated 24th October, 2008.

No comment is received from any of the constituents. If there are no comments, the minutes of the above meeting may please be confirmed.

ITEM NO. 2 REVIEW OF THE GRID PERFORMANCE DURING OCTOBER, 2008

2.1 POWER SUPPLY POSITION :

The power supply position of Eastern Region for the months of October'08 & September'08' is indicated at **Annexure-I**.

- From comparison of the generation figures of' October'08 with September'08, it is observed that the net energy generation (MU) in Eastern Region (including contribution of Bhutan) has decreased on per day average basis.
- The net peak demand met has decreased from 11664 MW to 11216 MW
- The demand met during October'08 has decreased by 448 MW, as compared to September'08. The percentage of Peak shortage of ER has decreased.

The above variations are considered normal.

Members may please note.

Deliberation in the meeting

Members noted the above

2.2 FREQUENCY:

The frequency profile of ER for the month of October' 08 and for the months of September'08& October' 07 (for comparison) is tabulated below :

Month	% of time of the month frequency remained			
	<49.0 Hz	49.0-50.5 Hz	50.5-51 Hz	>51.0 Hz
September'08	16.13	83.87	0.00	0.00
October'08	9.13	90.80	0.07	0.00
October,07	8.41	91.58	0.09	0.01

*Maximum (Inst.) Frequency : **50.71 Hz** on 28.10.08 at 15:09Hrs
Minimum (Inst.) Frequency : **48.61 Hz** on 14.10.08 at 22:34Hrs

From the above table following may be observed:

- The percentage of time frequency profile in the IEGC band (i.e. 49.0 to 50.5 Hz.) during the month of October'08 has decreased as compared to the previous month i.e. September'08 but increased marginally with respect to the corresponding month of the previous year (i.e. October'07).
- The percentage of time frequency below 49.0 Hz has increased to 90.80% in the month of October' 08, as compared to 83.87 % in September'08 but decreased as compared to the corresponding month of the previous year (i.e.October'07).
- The percentage of time frequency remained above 50.50 Hz in both the months of September'08 & Octobe'08 is insignificant.

The detailed daily frequency for the month of September'08 is enclosed at **Annexure-II.**

ERLDC may please comment on frequency profile observed during Oct'08

Members may please discuss.

2.3 VOLTAGE PROFILE OF IMPORTANT SUB-STATIONS IN EASTERN REGION

Name of the sub-station	Maximum Voltage (kV)	Minimum Voltage (kV)
400 kV PURNEA	433	408
400 kV BINAGURI	434	408
400 kV BIHARSHARIFF	427	398
400 kV DURGAPUR	424	407
400 kV PATNA	431	405
400 kV JEERAT	416	377

It may be noted that during the month of October' 08, voltages at Binaguri, Biharshariff, Durgapur, Patna and Purnea s/s remained on higher side, whereas minimum voltage (377KV) at Jeerat s/s was observed on lower side particularly during peak hours.

Members may please note and discuss.

Deliberation in the meeting

Members noted the above

2.4 UFR OPERATION IN ER

As System frequency remained above 48.5 Hz no UFR operation took place in ER grid during the month of October'08.

ITEM NO. 3A MAJOR TRANSMISSION LINES/ELEMENTS OUTAGES IN ER GRID

Sl. No	Description	Date Outage	Reason	Remarks
Lines / Elements under outage				
1.	315 MVA ICT-II at Maithon	16.06.08	Failure of R & Y Phase LA & Fire Hazard	<i>Expected by end of November'08. PowerGrid may please intimate the present status Powergrid representative informed that the transformer is expected to be restored by 15th December,2008.</i>
2.	220 kV Talcher TPS-Joda line-II	26.08.07	CB bursting at Talcher TPS	<i>Was expected by October'08. NTPC through a Fax message dated 07.11.08 indicated non availability of shutdown at TPS switchyard is the reason for delayed progress in the R&M work. NTPC representative informed that R&M work will be complete by 30th November,2008</i>
3.	150 MVA ICT-I at Bodhgaya	04.03.08	Fire hazard in Bodhgaya S/Stn.	<i>Procurement of new 150MVA ICT is in progress. Expected by April, 2010.</i>
Prolonged Outage				
1.	220/132 kV, 100MVA ICT-I at Fatuah	22.04.2002	Problem in Transformer winding	<i>BSEB may please indicate the present position. Rewinding work is in progress.</i>

ITEM NO. 3B Major units outage /Maintenance:

STATION	NO.	CAPACITY	DATE	REASONS FOR OUTAGE	EXPECTED DATE OF RESTORATION
Santaldih STPS	5	250	24.10.08	Oil leakage in turbine installation	31 st Jan,2009

Tenughat	1	210	29.10.08	Coal Shortage	12.11.08
IB TPS	1	210	01.11.08	Maintenance	17.11.08
Bakreswar	4	210	31.10.08	Maintenance	12.11.08

ITEM NO. 4 A GRID INCIDENCES IN ER SYSTEM DURING OCTOBER'08.

I. Tripping of 400kV FSTPP -Durgapur-I, 400kV Durgapur-Jamshedpur and Bus Reactor-I at Durgapur on 08.10.08:

On 08.10.08 at 16:25 Hrs Y-Ph CT associated with tie CB of 400kV Durgapur-Jamshedpur and Bus Reactor-I burst and Bus- Reactor-I tripped alongwith 400kV Durgapur- Jamshedpur and 400kV FSTPP-Durgapur-I. The above trippings occurred from FSTPP and Jamshedpur ends only. No tripping of breakers occurred at Durgapur end. Also auto-reclose was reported to be successful at Durgapur end for 400kV Durgapur- Jamshedpur line. All tripped lines /Bus reactor were normalized by 17:50Hrs.

Powergrid may further elaborate regarding breakers at Durgapur end not opening on initiation of fault and successful auto- reclosure of 400kV Durgapur – Jamshedpur line at Durgapur end.

Deliberation in the meeting

Powergrid representative informed that the above CT has been replaced. HE stated that failure of CTs from the same lot (BHEL Make CTs) took place in 400 KV Binaguri & Baripada Sub stations. BHEL has been requested to make detailed study to establish the reason of failure of the CTs.

II. Tripping of all running lines at PTPS and outgoing lines from PTPS on 11.10.08:

On 11.10.08 at 04:35 Hrs all outgoing 220kV lines from PTPS and 132kV PTPS-Hatia D/C tripped leading to tripping of all running units at PTPS. Fire hazard in 220kV bus coupler CT at PTPS was reported.

JSEB may furnish the reasons for occurrence of fire hazard and sequence of events after occurrence of the same.

Deliberation in the meeting

JSEB representative assured to submit the report shortly.

III. Tripping of 400kV TSTPP-Meramundali I & II from Meramundali S/S:

On 27.10.08 at 08:50 Hrs 400kV TSTPP-Meramundali-I tripped on bursting of R-Ph pole of tie breaker. This led to isolation of 400kV Bus-I & II as no other Tie CBs were in service. 400kV TSTPP-Meramundali-II was connected to Bus-I while 315MVA ICT-I & II and 400kV Meramundali –Jeypore were connected to

Bus-II. As a result TSTPP-Meramundali-II remained floating while power flowing towards Jeypore remained unaffected being fed from Meramundali 220kV side. 220/132 kV ATR-I also tripped (ATR-II was under breakdown). Tie CB of 400kV Jeypore-Meramundali at Meramundali end was taken into service after testing newly installed B-Ph CT leading to resynchronization of Bus-I & II. 400kV TSTPP-Meramundali-I was normalized at 17:17 Hrs after replacement of defective auxiliary contact at Meramundali end via Main breaker.

At present only one tie CB viz Tie CB of 400kV Meramundali-Jeypore is in service.

OPTCL may explain regarding operation of only one Tie CB previous to the incident and furnish programme of replacement of damaged Tie CB of 400kV TSTPP-Meramundali-I.

Deliberation in the meeting

OPTCL submitted a detailed report which is enclosed in Annex-V. Powergrid representative requested OPTCL to keep all the Tie CBs in service.

ITEM NO. 4 B FOLLOW UP ACTION OF THE PREVIOUS GRID INCIDENCES IN ER

In the last OCC meeting held at Patna, it was decided that a detailed analysis of the repeated tripping at Budhipadar, considering all the previous trippings generation addition, transmission line constraints in ER & WR grid will be carried out by GM, ERLDC and a report on corrective transmission planning to overcome the problem will be prepared for scrutiny & inclusion in future transmission planning.

ERLDC may apprise the progress in this regard.

Deliberation in the meeting

DGM, ERLDC informed that preliminary report in this regard has been prepared. He pointed out that, with generation addition in Chhattisgarh, loading in Korba(E) – Budipadar-Tarkera – Rourkrella - Raigarh sections could be critical in case of outage of any element in the associated 220 KV transmission system, resulting in trippings of transmission lines & causing generation loss in IB TPS & power stations in adjacent WR. He stressed on better planning of shutdown of associated 220/400 KV transmission line/element & close co-ordination (among ERLDC, WRLDC & SLDCs (Orissa & Chhattisgarh) to avoid such situations.

ITEM NO. 5 REPEATED TRIPPING OF 400kV JAMSHEDPUR-ROURKELLA-I

Repeated tripping of 400kV Jamshedpur-Rourkell-I on over-voltage have occurred, details of which are mentioned below:

Sl. No.	Tripping Date	Tripping Time	Restoration Date	Restoration Time
1	12.10.08	14:59	12.10.08	18:30
2	13.10.08	14:40	13.10.08	16:19
3	13.10.08	16:32	13.10.08	16:37
4	23.10.08	15:01	23.10.08	16:51
5	26.10.08	14:22	26.10.08	17:49
6	31.10.08	20:04	31.10.08	20:54

In all cases the voltages observed at either ends were less than 428kV. Repeated tripping of line-I needs to be investigated as voltage at either ends generally remain within limits.

Deliberation in the meeting

Powergrid representative informed that malfunction of relay had been reported & malfunction of CVT cannot be ruled out.

ITEM NO. 6 OPERATIONAL PLANNING

(A) REVIEW OF SHUTDOWN PROPOSALS, AS APPROVED IN LAST (31st) OCC MEETING OF ERPC vis-à-vis ACTUAL SHUTDOWN/ NORMALISATION OF THE TRANSMISSION SYSTEM FOR OCTOBER' 2008

The actual shutdown as availed by the constituents on the basis of finalised programme during the month of October '08 as well as planned / emergency shutdown as received from ERLDC is indicated at **Annex-III A**.

Members may please note and also furnish the additional / missing information, if any.

Deliberation in the meeting

Members noted the above

(B) SHUTDOWN PROPOSAL OF TRANSMISSION LINES AND GENERATING UNITS FOR THE MONTH OF DECEMBER'08.

The shut down proposals which are received by ERPC for the month of November' 08 are given at **Annexure – III B**.

Members may please discuss and finalize the proposed programme.

Deliberation in the meeting

All the shutdown proposals as approved after deliberation in the meeting for the month of December, 2008 are depicted in Annexure-III B.

(C) LGBR FOR THE MONTH OF NOVEMBER & DECEMBER (FOR THE YEAR 2008-09)

Anticipated Peak Demand (MW) and Energy Requirement (MU) for the months of November'08 & December'08.

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the months of November'08 & December'08 has been prepared by ERPC Secretariat on the basis of finalized LGBR for 2008-09, keeping in view that the units are available for generation and expected load growth etc. The details are shown at **Annexure-IV**.

Members may please note and indicate any discrepancy of the figures arrived at.

Deliberation in the meeting

SE (PS), ERPC informed that LGBR meeting for the year 2009-10 will be held in 2nd week of December, 2008. He requested the constituent members present in the meeting to submit their generation plan as well as maintenance programme of generating units for the year 2009-10. A letter dated 23rd October,08, addressed to all the constituents in this regard, was issued for submission of the following information :

- i) Unit-wise & station-wise monthly energy generation proposed from the existing units and annual generation plan in MU.***
- ii) Annual maintenance programme for each of generating units.***
- iii) Generating units under R&M /long outage indicating date of outage and reasons of outage & expected date of return.***
- iv) Partial and forced outage figure in % of generating unit for last years.***
- v) Month-wise peak demand in MW – restricted &unrestricted.***
- vi) Month – wise energy requirement in MU – restricted & unrestricted.***
- vii) Schedule commissioning of new generating units during 2009-10 and unit-wise monthly generation proposed.***
- viii) Allocation of power from new generating units.***

SE (PS) further informed that most of the constituents have not submitted the above. He requested to submit the same at the earliest.

ITEM NO. 7 COAL SUPPLY TO POWER STATIONS IN EASTERN REGION

FURNISHING OF LOSS OF GENERATION DUE TO COAL SHORTAGE

Loss of generation due to coal shortage is monitored by MOP and reports regarding the same needs to be furnished to MOP from time to time. Accordingly, constituents are requested to furnish figures for loss of generation due to shortage of coal at least on a weekly basis so that records can be compiled, to be forwarded to MOP as and when necessary. Figures may be furnished for each Thermal station indicating total daily loss of generation in MU and maximum loss of generation in MW during peak hours of the day.

A meeting on coal supply has been arranged today at 15:00 Hrs. in ERPC.

Deliberation in the meeting

Members agreed to furnish loss of generation figures due to coal shortage on weekly basis.

ITEM NO. 8 ISSUE RAISED BY

ERLDC

A. REVISION OF LTOA SCHEDULES FROM DVC TO NR/WR/WBSEB ON TRIPPING OF UNITS AT MEJIA TPS

It has been observed that on several occasions LTOA power from DVC to NR/WR/WBSEB was not revised even on tripping of units at Mejia TPS. Under such circumstances DVC continued to overdraw without any downward revision of schedule. LTOA schedule from DVC is generally kept flat throughout and is not varied as per actual availability of generation at Mejia TPS, in case of partial machine outages. Some instances of LTOA schedules not being revised even on unit outages are mentioned below :

UNIT	OUTAGE		RESTORATION		REMARKS
	DATE	TIME	DATE	TIME	
Mejia #6	06.10.08	14:05	06.10.08	18:44	Revision of schedule not done
Mejia #5	12.10.08	19:35	12.10.08	22:40	Machine tripped at 19:35 Hrs. Revision

					done w.e.f 21:30 Hrs.
Mejia #6	21.10.08	09:04	21.10.08	11:21	Revision of schedule not done
Mejia #6	21.10.08	22:10	23.10.08	12:06	Schedule revised only w.e.f.07:00 Hrs of 22.10.08 and not on 23.10.08
Mejia #6	03.11.08	22:55	05.11.08	15:15	Schedule revised w.e.f 00:30 hrs of 04.11.08
Mejia # 5	03.11.08	23:13	--	--	-DO-

From the above it can be observed that revision of schedule is either not done or delayed in some cases and DVC was overdrawing in most of the cases (except on 21.10.08 & 03.11.08). DVC may look into the matter and take prompt action for revision under such situations.

Deliberation in the meeting

CE, CLD, DVC assured to look into the matter

B. CONGESTION MANAGEMENT DURING WINTER MONTHS

During winter months, good thermal availability from West Bengal & DVC and reduced demand in Eastern Region, Congestion is likely to occur in 400 KV Farakka – Malda corridor, in passing on power to Northern Region & North- Eastern regions, because of drastic reduction of generation from Tala & Teesta HEP & simultaneous high demand in NR. The problem becomes more acute in off-peak hours during which hydro dispatch is minimized from Tala and Teesta.

The estimated TTC for simultaneous export of power from ER to NR & NER for the months of December,08 & January,09 are as follows :

Month	Off-peak TTC to NR & NER
December,08	2400 MW
January,09	2200 MW

Deliberation in the meeting

Members noted the above

ITEM NO. 10 DATE AND VENUE OF THE NEXT (33rd) OCC MEETING OF ERPC.

Date and venue of (33rd) OCC would be notified shortly.
