

# EASTERN REGIONAL POWER COMMITTEE

14, GOLF CLUB ROAD, TOLLYGUNGE  
KOLKATA-700033

## MINUTES OF 40<sup>th</sup> OCC MEETING HELD AT ERPC, KOLKATA ON 22.07.2009 (WEDNESDAY) AT 11:00 HRS

*The meeting was chaired by Sh. R. K. Grover, Member Secretary, ERPC. List of participants is at Annex-A.*

*Member Secretary, ERPC welcomed delegates of the 40<sup>th</sup> OCC meeting. He briefly touched upon various issues having impact on Eastern Regional grid performance during the month of June'09 (viz. late arrival of monsoon, coal problems and power cut in Orissa). He mentioned that with the arrival of monsoon, performance of hydro stations started improving, however overall grid supply position would vastly depend on performance of thermal stations, which were beset with coal related problems. He informed OCC members that Dr. L. Hari had relinquished his duty as General Manager, ERLDC and joined as CEO of a Testing Laboratory (a JV among Powergrid, NTPC, NHPC and DVC, set up for short circuit testing of transformers, the first of its kind in the country and Shri L. Kanungo took over the charge of GM, ERLDC. During interactions with the members, thermal generating stations in the region brought out coal related problems like wet coal, coal mixed with mud & stone and problems in unloading of coal. He then requested Shri D. K. Srivastava, DGM, ERLDC to apprise the members of grid conditions.*

*Sh. D. K. Srivastava, DGM, ERLDC briefly mentioned about power supply position and frequency of the grid prevailing during the month of June'09. He also informed the members about critical condition of the grid.*

*Member Secretary, ERPC requested Sh. A. K. Bandyopadhyaya, Superintending Engineer (PS), ERPC to take up agenda items.*

*Agenda items were then taken up.*

### ITEM NO. 1: CONFIRMATION OF MINUTES OF 39<sup>th</sup> OCC MEETING OF ERPC HELD AT ERPC, KOLKATA ON 19.06.2009

The minutes were circulated vide letter no. ERPC/SE(OPRN)/OPERATION/2009/3646-92 dated 24.07.09.

No comment is received from the constituents. Members may kindly confirm the minutes of the meeting.

#### *Deliberation in the meeting*

*No comment was received. Therefore the minutes of the meeting were confirmed without any modification.*

### ITEM NO. 2: REVIEW OF GRID PERFORMANCE DURING JUNE, 2009

#### 2.1 POWER SUPPLY POSITION :

The power supply position of Eastern Region for the months of June'09 & May'09 is indicated at Annexure-I. Salient observations are as follows:-

- Daily net energy generation (MU) in Eastern Region (including contribution of Bhutan) has increased marginally during June 09 compared to May 09 figure.
- Peak demand met has increased from 11549 MW in May 09 to 11904 MW in June '09 and peak demand has also increased from 12346 MW in May 09 to 12654 MW in June '09.
- Peak shortage of the region has reduced from 6.46% in May 09 to 5.93% in June 09. During the month of June 09, BSEB experienced the maximum peak shortage of 27.51%.

Members may please note.

**Deliberation in the meeting**

***Members noted the above.***

**2.2 FREQUENCY:**

The frequency profile of ER for the month of June'09 and May'09 is tabulated below:

Month *	% of time frequency remained between					
	<49.2 Hz	49.2-49.5 Hz	49.5-50.0 Hz	50.0-50.3 Hz	> 50.3 Hz	49.2-50.3 Hz
June'09	19.33	30.01	42.09	8.08	0.49	80.18
May'09	6.58	23.41	52.13	15.52	2.36	91.06

From the above, it may be seen that frequency profile has deteriorated considerably during the month of June 09 compared to the same in May 09. Maximum frequency was recorded during the month of June 09 was 50.64 Hz at 08:05 hrs 03.06.09 whereas minimum frequency was recorded was 48.74 Hz. Minimum frequency of 48.74 Hz was observed twice, once at 14:43 hrs on 25.06.09 and the another at 14:14 hrs on 27.06.09 . The detailed daily frequency for the month of June'09 is enclosed at Annexure-II.

*Members may please discuss.*

**Deliberation in the meeting**

***Members noted the above.***

**2.3 VOLTAGE PROFILE OF IMPORTANT SUB-STATIONS IN EASTERN REGION**

<b><i>Name of the 400 kV sub-station</i></b>	<b><i>Maximum Voltage (kV)</i></b>	<b><i>Minimum Voltage (kV)</i></b>
JEERAT	411	372
PURNEA	432	409
BINAGURI	433	409
BIHARSHARIFF	429	400
DURGAPUR	419	406
PATNA	431	405

It may be noted that during the month of June'09, voltages at Purnea, Binaguri, Biharshariff and Patna s/s remained on higher side, whereas minimum voltage (372KV) at Jeerat s/s was observed on lower side particularly during peak hours.

*Members may please note and discuss. WBSETCL may inform the members on status of installation of capacitors for improving voltage profile at Jeerat.*

**Deliberation in the meeting**

*Members noted the above. Representative of WBSETCL informed that they were in the process of installing capacitors. Representative of ERLDC mentioned that they had received a request from West Bengal to raise the voltage level of 220 kV side of ICT at Subhashgram by changing the tap position of the ICT in order to tide over the low voltage problems around Lakhikantpur area. It was opined by ERLDC that such tap changing of ICT might resolve the problem to some extent; however West Bengal might land up in paying VAR charges, which might be higher than the cost of capacitors. Members took note of it.*

*[Attention: WBSETCL]*

**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 June'09.

**Deliberation in the meeting**

*Members noted the above.*

**2.5 WATER LEVEL IN MAJOR HYDRO RESERVOIRS IN THE EASTERN REGION DURING JUNE' 2009**

Name of the Reservoirs	Level in mtrs. On last day of the month	
	30.06.09	30.06.08
Balimela	439.21	441.53
Hirakud	181.38	181.46
Indravati	625.20	627.0
Rengali	109.72	114.4
Upper Kolab	844.51	844.87
Subarnarekha	766.64	767.6
SHPS, SIKDRI	1906.25 ft	1917.40 ft

Source: CEA report

It may be noted that water level in Rengali HEP is at MDDL whereas water level at Indravati HEP is near MDDL. Members may kindly note and discuss.

**Deliberation in the meeting**

*Members noted the above. It was also noted that with the arrival of monsoon, water level in the reservoirs started improving. Representative of OHPC informed that after a long period, all the units of Burla and Chiplima were running. Present water level in various reservoirs of Orissa is given below:*

Name of the Reservoirs	Water level as on 22.07.09	Average Generation on 21.07.09 (in MW)
<i>Balimela</i>	<i>1453.50 ft</i>	<i>163</i>
<i>Hirakud</i>	<i>620.17 ft</i>	<i>Burla-207 Chiplima-17</i>
<i>Indravati</i>	<i>633.50 m</i>	<i>192</i>
<i>Rengali</i>	<i>114.78 m</i>	<i>161</i>
<i>Upper Kolab</i>	<i>848.00 ft</i>	<i>59</i>
<i>Machkund</i>	<i>2722.40 ft</i>	<i>21</i>

## 2.6 OPERATIONAL DISCIPLINE DURNG JUNE' 2009

In the interconnected NEW grid, adherence to operational discipline has become more important than ever before. ERLDC is requested to furnish instances of non-adherence to their instructions by constituents.

Members may kindly discuss.

### Deliberation in the meeting

*Representative of ERLDC informed that total A, B, C and SC type of messages issued during the month of June'09 was 241. It was heartening to note that average non compliance to above messages during the month of June'09 was reduced to 30% compared to 81% in May'09. It was further noted that DVC's non-compliance during the month of June'09 was 40% and members appealed to DVC to adhere to ERLDC's messages.*

*[Attention: DVC]*

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

Sl .	Description	Date Outage	Reason	Remarks
<b>Lines / Elements under outage</b>				
1	400 KV TALA - MALBASE	23/05/09	400Kv cable burst at Tala end	<i>Restoration period as furnished by THPA during last OCC was 1<sup>st</sup> week of July 09. THPA may please update.</i>
2	400 KV TALA - BINAGURI - IV	02/05/09	CB problem at Tala end	<i>Restoration period as furnished by THPA during last OCC was mid of July 09. THPA may please update.</i>
3	FSC/TCSC of 400Kv Jeypore-Gazuwaka-I & II	25/06/09	Prob. in Control Panel	Powergrid may furnish target restoration date
4	FSC/TCSC of 400Kv Jeypore-Meramundali	14/04/09	Prob. in Control Panel	Powergrid may furnish target restoration date

Presently, generation of Tala HEP is getting evacuated through 400 kV Tala-Binaguri - I & II only. Generation at Tala has now fully picked up and in case of tripping of one line, the other line is getting overloaded. Therefore, Tala HEP may expedite restoration of 400 kV Tala-Malbase-Binaguri and 400 kV Tala-Binaguri-IV to prevent any loss of generation to ER due to tripping/backing down of generation at Tala HEP.

Members may kindly indicate expected date of restoration of transmission elements.

**Deliberation in the meeting**

*It was noted that 400 kV Tala-Malbase line was charged on 21/07/09. Representative from Bhutan informed that 400 kV Tala-Binaguri line #IV would be restored by November'09. Representative of Powergrid informed that FSC/TCSC of 400 kV Jeypore-Gazuwaka-I & II and 400 kV Jeypore-Meramundali were ready for charging.*

**ITEM NO. 4: GRID INCIDENCES IN ER SYSTEM DURING JUNE, 2009.**

**I. Tripping of all units of CHPC on 03/06/09**

At 13:38 Hrs of 03/06/09, 220kV CHPC-Birpara I & II and 220kV CHPC-Malbase-Birpara tripped on E/F resulting in tripping of all running units at CHPC. Tripped lines/units were restored by same day.

CHPC/Powergrid may furnish further details and members may kindly discuss.

**Deliberation in the meeting**

*During deliberation, it was understood that there was conductor snapping in 220 kV Chukha-Birpara circuit#1 at Loc. 161 (Bhutan part). The CB at Birpara end opened, however due to inexplicable reasons, the line breaker at Chukha end did not operate resulting into generator feeding the fault. Eventually all the machines went out of bar on unrestricted earth fault. Members opined that this was a serious case of mal-operation of protection system at Chukha end, which might endanger the life of generating units and need to be investigated. Representative of Chukha informed that the matter would be discussed in internal protection committee meeting of Bhutan and any further development would be intimated to ERPC.*

**[Attention: Chukha HEP]**

**II. Tripping of all lines from 220 kV Joda S/S on 11/06/09**

At 21:37 Hrs of 11/06/09 all 220 kV lines from Joda S/s tripped reportedly due to breaker problem of 220 kV TTPS-Joda-II at Joda end. All tripped lines were restored immediately except 220KV TTPS-Joda-II, which was restored after attending breaker problem at Joda end.

OPTCL may furnish further details regarding the incident and members may kindly discuss.

**Deliberation in the meeting**

**OPTCL submitted the following details:**

- ✓ 220 kV Joda-Ramchandrapur line tripped at Joda end on Aux relay indication
- ✓ 220 kV Joda-TTPS-II tripped at Joda end on E/F relay indication
- ✓ 220 kV Joda-TTPS-I tripped at TTPS end on E/F relay indication
- ✓ 220 kV TSIL feeder tripped at Joda end on Trip relay indication
- ✓ 220/132 kV Auto-I tripped on 220 kV side on O/C and 132 kV side on E/F relay indication.

**OPTCL opined that several lines were out due to transient fault in the system.**

*However, members decided to further look into the incident leading to outage of multiple lines in a special meeting at Bhubaneswar with representatives from ERPC, ERLDC, OPTCL and Powergrid followed by Protection sub-Committee meeting.*

### **III. Tripping of all lines/ICTs from Birpara on 15/06/09**

At 07:58 Hrs of 15/06/09 due to LA bursting at Birpara(WBSETCL) end, both 220/132 kV ICTs and 132 kV Birpara(PG)-Birpara(WB) tripped. All tripped lines/units were restored by same day.

Powergrid may furnish further details regarding the incident and members may kindly discuss.

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

*PGCIL informed that bursting of R-ph LA in Birpara (PG)-Birpara (WBSETCL) circuit#2 at Birpara (WBSETCL) end resulted into equivalent bus fault at Birpara (WBSETCL). Members noted that outage of all the lines and ICTs was therefore seemed to be in order.*

### **IV. Disturbance in South Orissa system on 19/06/09**

On 19/06/09 the following sequence of events occurred (as per preliminary report from OPTCL/Powergrid) leading to collapse of South Orissa system:

- ✓ At 14:46Hrs 220 kV Theruvali-Bhanjanagar-II tripped on E/F.
- ✓ At 14:48Hrs voltage dip of 180 kV was observed at Balimela Bus and all running units at Balimela tripped.
- ✓ At 14:49 hrs Indravati(O)-Indravati(PG) tripped on overvoltage at Indravati(O) end alongwith Indravati Unit#1
- ✓ At 14:54 Hrs 220 kV Theruvali-Bhanjanagar-I tripped on E/F. Also 400 kV Meramundali-Jeypore and 400 kV Jeypore-Gazuwaka-II tripped on overvoltage stage-I at Jeypore.
- ✓ At 14:55 hrs 315MVA ICT-I at Jeypore tripped on overflux.
- ✓ At 14:57 hrs 315MVA ICT-II at Jeypore tripped on overflux.

400 kV Rengali-Indravati-Jeypore section however remained charged in floating condition with 400 kV Indravati(PG)-Indravati(O) remaining charged from Indravati(PG) end. Prior to the incident HVDC Gazuwaka Poles were under standby condition due to problem in downstream evacuation in SR system and 400 kV Jeypore-Gazuwaka-I was open on overvoltage.

GRIDCO suffered total generation loss of 445 MW (295MW at Balimela [all 6 units] and 150MW at Indravati [Unit#1]). 220 kV Theruvelli-Bhanjanagar-I was declared under breakdown and restored later.

Members may kindly discuss the incident and following events may be analyzed.

- a. Voltage dip at Balimela bus leading to tripping of all units.
- b. Tripping of Indravati(O)-Indravati(PG) from Indravati(O) on overvoltage
- c. Tripping of Theruvali-Bhanjanagar circuits on E/F in a staggered manner.

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

*OHPC submitted that due to tripping of Balimela-Jayanagar line and tripping of*

*transformer at Jayanagar, the Indravati-Jayanagar line was in floating condition leading to rise in voltage at Indravati which caused tripping of Indravati units. However, proper sequence of events could not be established. Members referred the incident to a special meeting to be held at Bhubaneswar with representatives from ERPC, ERLDC, OPTCL and Powergrid followed by Protection sub-Committee meeting.*

**V. Disturbance at Meramundali S/s on 24/06/09**

At 18:24 Hrs of 24/06/09, 400 kV Meramundali-Jeypore tripped on over voltage initiated at Jeypore end alongwith tripping of 400 kV TSTPP-Meramundali-II. At 19:01 Hrs, all 220 kV lines from Meramundali alongwith 2x315MVA ICTs tripped due to reported 220 kV Bus fault at Meramundali S/s. Tripped lines were restored by same day.

Tripping of 400 kV Meramundali-Jeypore on over voltage may be explained by PGCIL/OPTCL as voltage at either end were not high.

OPTCL may also furnish further details regarding the incident and members may kindly discuss.

**Deliberation in the meeting**

*Representative of OPTCL informed that at 18:55 hrs 220 kV Meeramundali-Chandka ckt tripped at Meeramundali end on distance protection in R, Y phase E/F and tripped at Chandaka end at B phase E/F. At 19:00 hrs while charging 220 kV Meeramundali-Chandaka ckt, it tripped followed by tripping of all 220 kV lines emanating from 220 kV Bus-I of Meeramundali S/s. The tripping was due to fault on 220 kV Meeramundali-Chandaka line (B phase insulator damaged at location no. 620). All lines restored except 220 kV Meeramundali-Chandaka line, which was subsequently charged at 01:44hrs on 25.06.09. The issue was referred to the special meeting to be held at Bhubaneswar as mentioned in item 4(II) and 4(IV).*

**VI. Repeated Tripping of 400Kv FSTPP-Malda -II on overvoltage**

400 kV Farakka-Malda-II tripped on over-voltage from Malda end with DT to FSTPP at 06:02 Hrs of 29/06/09. The same tripping again occurred at 01:57 Hrs of 30/06/09. Bus voltages at Malda end in both the above cases were below 420 kV.

Powergrid may explain the trippings on overvoltage and members may kindly discuss.

**Deliberation in the meeting**

*Representative of Powergrid informed that both the above tripping occurred due to mal-operation of relay at Malda end. The relay was subsequently set right.*

**ITEM NO. 5: OPERATIONAL PLANNING**

**(A) REVIEW OF SHUTDOWN PROPOSALS, AS APPROVED IN LAST (39<sup>th</sup>) OCC MEETING OF ERPC vis-à-vis ACTUAL SHUTDOWN/ NORMALISATION OF THE TRANSMISSION SYSTEM FOR JUNE' 2009**

The actual shutdown as availed by the constituents on the basis of finalised programme during the month of JUNE'09 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 AUGUST'09.**

The shut down proposals which are received by ERPC for the month of August' 09 are placed before the committee.

Members may please discuss and finalize the proposed programme.

**Deliberation in the meeting**

*The approved shut-down programme is given at Annexure-III B.*

**© ANTICIPATED POWER SUPPLY POSITION FOR THE MONTH OF JULY'09 & AUGUST'09**

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the months of July'09 & August'09 were prepared by ERPC Secretariat on the basis of finalized LGBR for 2009-10, 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 discuss.

**Deliberation in the meeting**

*Members noted the above.*

**ITEM NO. 6: TAPPING OF 66 KV RANGIT-MELLI LINE TO SUPPLY TO RAVANGLA**

Chief Engineer, Sikkim vide his letter dated 18<sup>th</sup> June 09 requested Member Secretary, ERPC to explore the possibilities of tapping 66 kV Rangit-Melli line (PGCIL line) at Ravangla. The matter was referred to GM, ERTS for technical feasibility. During discussion in 10<sup>th</sup> Commercial sub-Committee meeting of ERPC, it was understood that the line has already been tapped at Sagbari without any prior permission from competent authority.

Members may kindly discuss.

**Deliberation in the meeting**

*Representative from NHPC informed that 66 kV Rangit-Melli line was already tapped at Rohtak, whereas LILO of 132 kV Rangit-Melli would be done at Sagbari (very near to Rangit). ERLDC pointed out that circuit breaker and proper protection and metering arrangement need to be provided at both Sagbari and Rohtak. It was understood that presently Ravangla is getting power from 11 kV Namchin S/s. As representative of Sikkim was not present, the matter could not be discussed further. Therefore, it was decided that ERPC Secretariat would arrange*

*a meeting with representatives from Sikkim, Powergrid and Rangit HEP to sort out the matter.*

*[Attention: ERPC Secretariat]*

**ITEM NO. 7: SUSTAINED OVERDRAWAL BY NR FROM ER THROUGH ER-NR CORRIDOR -- WBSIEDCL**

It is observed that for past two months, short term open access and collective transaction from ER to NR has been getting hampered due to route constraints. But as per ERLDC website, sustained overdrawal of NR to the tune of 500 -800 MW (irrespective of the frequency) has been noticed.

ERLDC may please opine and members may kindly discuss.

**Deliberation in the meeting**

*Representative of WBSIEDCL opined that there was curtailment of STOA transaction during the period from 01.06.09 to 06.06.09 and 26.06.09 during some hours of the day. Representative from ERLDC stated that during the period there were a number of tower collapse in the Northern grid for which there was congestion vis-à-vis limiting ATC in the available transmission system connecting Eastern part and Western part of Northern grid. The curtailment was undertaken in order to avoid congestion in the Northern grid keeping security in mind. ERLDC representative also opined that any overdrawal by NR constituents is duly taken up by NRLDC at appropriate forum for corrective action.*

**ITEM NO. 8: LOSS OF GENERATION DUE TO SHORTAGE OF COAL AND COAL SUPPLY POSITION**

Following coal based thermal generating stations in Eastern Region have reported loss of generation in the month of June'09 due to shortage of coal.

Sl No	Station	IC (MW)	Loss of generation in MU
1	Talcher Stage-I	1000	35.43
2	Kahalgaon	1800	51.616
3	Kolaghat TPP	1260	67.011
4	IB TPS	420	5.557

Other generating stations are also requested to furnish loss of generation suffered in the month of June 09, if any, due to shortage of coal. As on 30.06.09, out of 23 coal based thermal stations in Eastern Region, 12 stations were critical with less than 7 days coal stock and 6 stations were super-critical with less than 4 days coal stock (Source: CEA website) and coal stock at Mejia and Muzaffarpur TPS were shown as nil. Coal supply position to various power stations in ER as furnished to ERPC Secretariat is as below:

Sl. No	Name of Constituents	Coal Stock Position as on 30.06.09	Daily Requirement
1.	<b>BSEB:</b> Baruani TPS Muzaffarpur TPS	1846 MT	
2.	<b>JSEB:</b> Patratu TPS	10844 MT	
3.	<b>TVNL:</b> Tenughat TPS		6500 MT

4.	<b>WBPDC:</b> Kolaghat TPS Santalidih TPS Bandel TPS Bakreswar TPS	87320 MT  18686 MT	555768 MT
5.	<b>CESC:</b> BUDGE BUDGE TITAGARH SOUTHERN NEW COSSIPORE	122553 11977 29698 10206	7400 MT 3500 MT 2600 MT 1650 MT
6.	<b>OPTCL :</b> Ib TPS	186113 MT	8500 MT
7.	<b>NTPC:</b> FSTPS KhSTPP TSTPS		32640 MT 37536 MT 61200 MT
8.	<b>DVC:</b> Bokaro Chandrapur Durgapur Mejia	NA NA 137855 MT (07.07.09) 5000 MT (07.07.09)	11000 MT 6000 MT 5000 MT 19000 MT

Members may update the missing information and discuss.

**Deliberation in the meeting**

*Members noted the above.*

**ITEM NO. 9: DECLARING OF PEAK HOURS FOR SCHEDULING PURPOSES UNDER FUEL SHORTAGE CONDITIONS**

It has been decided that for purposes of scheduling under fuel shortage conditions prior declaration of peak hours would be done on month ahead basis. Based on existing demand curve it is felt that peak hours for the month of August'09 may be considered from 18:30 Hrs to 21:30 Hrs. Members may kindly decide.

**Deliberation in the meeting**

*Members approved the above.*

**ITEM NO. 10: FREE GOVERNOR MODE OPERATION**

Generating stations were requested to furnish their preparedness for participating in FGMO in the last OCC meetings. Accordingly Member Secretary, ERPC vide letter no. ERPC/OPRN/2009 dated 05.05.09 and 19.06.09 requested all concerned to furnish information as per format. Response has been received from DPL, IB TPS, WBPDC generating stations and Teesta HEP.

Others are requested to furnish the above data at the earliest and members may please deliberate.

**Deliberation in the meeting**

*During the meeting, CESC and OHPC submitted the above information. Rest of the generating stations were requested to furnish the above information.*

**ITEM NO. 11: OPERATION CONSTRAINTS AT 400 kV MERAMUNDALI S/S --- ERLDC**

The present configuration of lines/ICTs connected to 400 kV buses at Meramundali S/s are as follows:

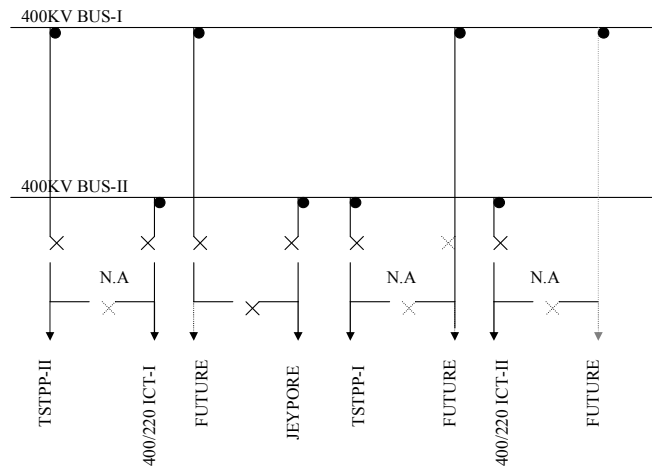
Bus-I	Bus II
400 kV TSTPP-Meramundali-II	400 kV TSTPP-Mermundali-I 400/220 kV, 315 MVA ICT-1 400/220 kV, 315 MVA ICT-2 400 kV Meramundali-Jeypore

The tie-breakers for 400 kV TSTPP-Meramundali-II, 400/220 kV ICT-1, 400/220 kV ICT-2 and 400 kV TSTPP-Mermundali-I are not available at Meramundali end since long. As a result Bus-I & II remain synchronised only via the tie and main breaker of 400 kV Meramundali-Jeypore and any outage of these breakers leads to decoupling of the Buses. Therefore, with tripping of 400 kV Meramundali-Jeypore line, the Buses get decoupled and TSTPP-Meramundali-II becomes floating.

Considering the importance of the S/s, Members may please deliberate on commissioning of the above tie breakers.

**Deliberation in the meeting**

**Switching arrangement at Meeramundali S/s is given below:**



*From the above diagram, the bus arrangement resembles incomplete one and half breaker scheme. In the present case, bus-I and bus-II is connected only by tie and main breaker of 400 kV Meeramundali-Jeypore line and any outage of these breakers leads to decoupling of the buses. Non-availability of other tie breakers had forced the 400 kV Meeramundali System to act like single bus scheme and unless these tie breakers are provided, system security is heavily endangered which might eventually lead to system collapse. Therefore, OPTCL was requested to arrange for these tie breakers on urgent basis. Until these arrangements are made, OPTCL was requested to explore the possibility of connecting ICT-II to bus-I so that interconnectivity between bus-I and bus-II gets strengthened. This issue would be discussed in the special meeting at Bhubaneshwar as mentioned in item 4(ii) and 4(iv).*

**[Attention: OPTCL]**

**ITEM NO. 12: PROCUREMENT OF 315 MVA, 400/220 KV AUTOTRANSFORMER AS SPARE FOR EASTERN REGION -I UNDER ADDITIONAL CAPITALIZATION -- PGCIL**

Presently in Eastern Region-I is having 15 nos 315 MVA, 400/220 kV ICTs and 5 nos of 100 MVA 220/132 kV ICT. However, spare ICT is not available in the region. The 315 MVA ICTs of Biharshariff and Jamshedpur are quite old, commissioned in early 90's. Particularly, the 315 MVA ICT-II installed at Biharshariff substation in 1992 is having problem of large fault gases. As per our earlier experience, in case of failure of ICT the time consumed in repair/supply of new transformer takes 6/8 months time which severely affects the downstream power supply. Therefore, it is proposed to procure one no. 315 MVA, 400/220 kV Autotransformer to be kept as spare for the region to meet any exigency under additional capitalization. The constituents may please agree the proposal in principle.

Members may kindly discuss.

**Deliberation in the meeting**

*Powergrid placed a revised agenda for procurement of two no of 400/220 kV, 315 MVA ICT and 50 MVAR shunt reactor for Eastern Region as O&M spare. Members decided to place it in next OCC meeting.*

**ITEM NO. 13: Tap positions of 400/220 kV ICTs of important 400 kV Substations in ER -- ERLDC**

The tap positions of 400/220 kV ICTs of important 400 kV substations in ER are given below:

SUBSTATION	TAP POSITION	SUBSTATION	TAP POSITION
BIHARSHARIFF	14	ROURKELLA	10
DURGAPUR	11	PUSAULI	11
JAMSHEDPUR	15	BINAGURI	10
MAITHON	13	JEYPORE	16
MALDA	12	KhSTPP	10(400/132 kV)
MUZZAFFARPUR	9B	TALCHER	13
PURNEA	11	FSTPP	11
RENGALI	12	BARIPADA	7
SUBHASGRAM	13	PATNA	11
RANCHI	9B	KOLAGHAT	12
JEERAT	13	MERAMUNDALI	9B
ARAMBAG	13	BAKRESHWAR	11
INDRAVATI	9B		

Members may kindly indicate additions/corrections if any.

**Deliberation in the meeting**

*Members decided to drop this item from agenda.*

**ITEM NO. 14: FURNISHING OF DATA REGARDING OVER-VOLTAGE STAGE-I & II SETTINGS OF 400KV SUBSTATIONS IN ER --- ERLDC**

In order to ensure proper co-ordination, over-voltage setting of all 400 kV lines (stage-

I and Stage-II) may be submitted to ERLDC. ERLDC after study of the same would recommend suitable time/voltage grading to prevent any contingency which may occur due to over-voltage trippings.

Members may please note.

**Deliberation in the meeting**

*Members decided to drop this item from agenda.*

**ITEM NO. 15: UPDATION OF NLDC WEBSITE --- WBSEDCL**

In RLDC websites, real time schedule vs. actual drawal of regional constituents are displayed. But no such data are displayed in NLDC website. Such information will be helpful in achieving transparency.

Members may please discuss.

**Deliberation in the meeting**

*Representative of WBSEDCL requested that real time schedule vs. actual drawal of the inter-regional flows might be displayed at NLDC websites. He also pointed out that unlike other RLDC website, NRLDC website does not display real time schedule vs. actual drawal of Northern Regional constituents. He mentioned that such information will help them in making judicious trading decisions. Members took note of it and requested ERLDC to look into it, if possible.*

*[Attention: ERLDC]*

**ITEM NO. 16: ANY OTHER POINT**

*ERLDC informed that they were still awaiting nomination from BSEB and JSEB in the Disaster Management Group for Eastern Region. BSEB and JSEB were requested to submit the nomination at the earliest.*

*[Attention: BSEB and JSEB]*

**ITEM NO. 17: DATE AND VENUE OF THE NEXT (41<sup>st</sup>) OCC MEETING OF ERPC.**

*It was decided that DVC would host the next (41<sup>st</sup>) OCC meeting at Mejia TPS around middle of August 2009. Exact date and venue of the meeting would be communicated later.*

*The meeting ended with thanks to the Chair.*

\*\*\*\*\*

**ANNEXURE- IIIB****Approved Programme of Maintenance Of Transmission Lines And Generating Units as proposed for the Month of AUGUST, 2009**

Organization	Name of the Element	From		To		Remarks
		Date	Time	Date	Time	
<b>NTPC</b>						
<b>Farakka</b>						
	Unit # 5	27.07.09	OCB	20.08.09	OCB	Annual Overhauling
<b>Kahalgaon</b>						
	400kV Kahalgaon -Biharshariff line-2	05.08.09	ODB	05.08.09	ODB	For Preventative Maintenance & testing
	400kV Kahalgaon -Maithon line-1	12.08.09	ODB	12.08.09	ODB	For Preventative Maintenance & testing
	400kV Kahalgaon -Maithon line-2	19.08.09	ODB	19.08.09	ODB	For Preventative Maintenance & testing
<b>WBDCL</b>						
	Kolaghat U#1	26.08.09	OCB	06.09.09	OCB	Overhauling
	Sagardighi U#2	01.08.09	OCB	15.08.09	OCB	Boiler Overhauling
	Bandel U#5	01.08.09	OCB	14.09.09	OCB	Boiler Overhauling
	Bakreswar U#2	26.08.09	OCB	10.09.09	OCB	Annual overhauling
<b>Powergrid</b>						
	400 kV New Purnea-Binaguri line-2	20.07.09	OCB	05.09.09	OCB	Bay upgradation work
	400/220 kV, 315 MVA ICT at Purnea					
	400 kV Farakka-Sagardighi	26.07.09	OCB	30.07.09	OCB	Annual Maintenance
<b>DPL</b>						
	Unit#7	20.07.09	OCB	1 <sup>st</sup> week of August 09	OCB	PG Test
	Unit#3	1 <sup>st</sup> week of August 09	OCB	20 days	OCB	AMC
<b>NHPC</b>						
	Teesta-V (all units)	31.07.09	OCB	01.08.09	OCB	Mandatory Reservoir flushing

<b>DVC</b>					
BTPS-B, Unit#2	1 <sup>st</sup> week of August09	OCB	40 days	OCB	Capital O/H
CTPS, Unit#3	3 <sup>rd</sup> Week of July 09	OCB	60 days	OCB	Capital O/H
<b>WBSETCL</b>					
132 kV Malda (PG)-Malda (WB)#1	04.08.09	ODB	04.08.09	ODB	Maintenance
132 kV Malda (PG)-Malda (WB)#2	06.08.09	ODB	06.08.09	ODB	Maintenance

OCB: On Continuous basis, ODB: On Daily Basis