

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

**MINUTES OF THE 27th OCC MEETING HELD AT ERPC, KOLKATA
ON 20.06.2008 (FRIDAY) AT 11:00 HRS**

List of participants is enclosed at Annexure-I.

Shri R.K.Grover, Member Secretary, ERPC chaired the meeting. While welcoming the delegates in the 27th OCC meeting, he mentioned that the integrated grid frequency has improved in May'08 as compared to April'08. He expressed concern over forced shutdown of all the thermal units of Kolaghat TPS due to water logging in the 6.6 KV Aux system resulted from heavy rain. Continuous outages of all the three Teesta – V Units due to high silt content in water was also a cause of concern. Member Secretary expressed that BSEB & JSEB may have to draw U.I. power to meet their demand as there is no generation from Teesta - V. In this regard BSEB representative was requested to clear huge outstanding dues on U.I. account.

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

ITEM NO: 2 REVIEW OF THE GRID PERFORMANCE DURING MAY, 2008

2.1 POWER SUPPLY POSITION :

The power supply position of Eastern Region for the months of May' 08 & April' 08 is indicated at Annexure-II.

- From comparison of the generation figures of May' 08 with April' 08, it is observed that the net energy generation (MU) in Eastern Region (including contribution of Bhutan) has marginally decreased on per day average basis.
- The net peak demand met has increased from 10750.MW to 10787 MW.
- The demand met during May'08 has increased by 37 MW, as compared to April' 08. The percentage of Peak shortage of ER has reduced marginally.

The above variations are considered normal.

Members may please note.

Members noted the above.

2 FREQUENCY:

The frequency profile of ER for the month of May' 08 and for the months of April' 08 & May' 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

April'08	29.77	70.22	0.01	0.00
May'08*	3.16	96.28	0.56	0.00
May '07	1.55	98.42	0.03	0.00

* Maximum (Inst.) Frequency : **50.71Hz** on 31.05.08 at 18:01 Hrs
Minimum (Inst.) Frequency : **48.65Hz** on 01.05.08 at 00:03 Hrs

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 May' 08 has considerably increased as compared to the previous month i.e. April'08. However, it has shown deterioration over the corresponding month of the previous year (i.e. May'07).

- The percentage of time frequency below 49.0 Hz has decreased to 3.16 in the month of May' 08, as compared to 29.77 in April'08, but has increased from the corresponding month of the previous year (i.e. May'07).
- The percentage of time frequency remained above 50.50 Hz in both the months of April'08 & May'08 is insignificant.

Members noted the above.

3 ACTUAL DRAWAL VIS-À-VIS DRAWAL SCHEDULE

The constituent wise actual drawal as against the drawal schedule for the month of May'08 is given below:

Constituent/ System	Drawal Schedule (MU)	Actual Drawal (MU)	Total Over drawal (+) / Underdrawal (-) (MU)
BSEB	684	673	-11
JSEB	156	177	21
GRIDCO	585	660	75
DVC	52	-54	-106
SIKKIM	71	20	-51
WEST BENGAL	424	196	-228
SR	-44	314	358
NER	61	20	-41
WR	117	155	38
NR	621	479	142

All drawal schedules are arrived at considering bilateral export.

4 DETAILS OF POWER EXCHANGE WITH OTHER REGIONS

The detail of net energy exchange of ER with other regions for the month of May' 08 is given below:

ER to NER –	19.62MU (Export)
ER to SR -	314.39MU (Export)
ER to WR -	155.33MU (Export)
ER to NR -	478.73MU (Export)

Net export to outside regions -968.06 MU

Members may please note.

Members noted the above.

5 VOLTAGE PROFILE OF IMPORTANT SUB-STATIONS IN EASTERN REGION

Name of the sub-station	Maximum Voltage (kV)	Minimum Voltage (kV)
400 kV PURNEA	427	376
400 kV BINAGURI	432	406
400 kV BIHARSHARIFF	427	396
400 kV DURGAPUR	427	404
400 kV PATNA	428	390
400 kV JEERAT	414	376

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

Members noted the above.

6 UFR OPERATION IN ER

Though the instantaneous minimum frequency did not touch 48.5 in the month of May'08 GRIDCO reported UFR actuated load shedding of 21.5 MW in 33 kV Annandpur feeder of Jajpur Road s/stn on 01-05-08.

Members noted the above.

ITEM NO: 3 IMPORTANT EVENTS

- I. **Tap position of ICTs at Patna were changed from 9B to 11 on 04.06.08 as Fatuah s/s and adjoining areas were facing low voltage consequent to outage of 220kV Biharshariff – Fatuah D/C on tower collapse.**

Deliberation in the meeting

Members noted the above.

ITEM NO: 4 MAJOR TRANSMISSION LINES/ELEMENTS OUTAGES IN ER GRID

Sl. No	Description	Date of Outage	Reason	Remarks
Lines / Elements under outage				
1.	220 kV Biharshariff - Fatuah D/C	02.06.08	3 Nos. Towers collapsed	<i>BSEB may please furnish target date of restoration. The line is expected to be restored by 27-06-2008</i>
2.	132 KV Patna-Gaya D/C	12.05.08	Tower collapse	<i>BSEB may please furnish target date of restoration. The line was restored on 04-06-2008.</i>

3.	220 KV CTPS-Bokaro (L-205)	04.06.08	Tower collapse	<i>DVC may please furnish target date of restoration. The line was restored on 12.06.2008. .</i>
4.	220 KV Bakreshwar-Gokarna -I	03.05.08	Tower collapse (2 Nos.)	<i>WBSETCL may please furnish target date of restoration. The line is expected to be restored by end of June,2008.</i>
5.	150 MVA ICT-I at Bodhgaya	04.03.08	Fire hazard in Bodhgaya s/s	<i>R & M works of the ICT ordered and expected within 15-24 months.</i>
6.	220 KV Talcher TPS-Joda line-II	26.08.07	CB bursting at Talcher TPS	<i>R&M work of the switchyard by BHEL is in progress, expected to be completed by 1st October,2008.</i>
Prolonged Outage				
1.	220 KV PTPS-Bodhgaya T/C	2005	Tower collapse and conductor theft	<i>Local representative of PGCIL at Patna shall follow up with PGCIL Corporate office at Delhi to submit the cost estimate to JSEB at once and finalize a meeting accordingly with JSEB.</i>
2.	220/132 KV, 100MVA ICT-I at Fatuah	22.04.200 2	Problem in transformer winding	<i>Work order issued for repair which is expected by August'08.</i>

Deliberation in the meeting

Members indicated the above status.

ITEM NO: 5 GRID INCIDENCES IN ER SYSTEM DURING MAY & JUNE '08

- I. At 17:30 Hrs of 08.05.08 all four running units at Bakreswar tripped. All outgoing lines from Bakreswar TPS also tripped (220kV Bakreswar-Gokarna D/C and 220kV Bakreswar – Bidhannagar D/C were already out prior to the tripping on tower collapse). Prior to tripping of units, generation at Bakreswar TPS was around 760MW. System frequency dropped from 49.8Hz to 49.26Hz as a result of above. All tripped lines/ units were restored by 09.05.08.

WBSETCL may please furnish the detailed report.

Deliberation in the meeting

OCC observed the sequence of tripping was in order.

- II. At 13:46 Hrs of 18.05.08 220kV bus segregation at Budhipadar s/s occurred following tripping of 220kV Budhipadar-Tarkera ckt-I & II and 220kV bus coupler at Budhipadar. 132kV lines from Budhipadar also tripped and Chiplima HPS and Burla HPS tripped in a staggered manner. While bus-I at Budhipadar became dead, bus-II survived with IB TPS units remaining synchronized to Korba (E)/WR side. At around 14:10 Hrs due to sequence of events initiated at WR side, part of WR system comprising Korba area alongwith IBTPS units got islanded and frequency of the isolated

system fluctuated wildly. IBTPS units tripped at around the same time on high system frequency. In an isolated sequence of events at ER side fire hazard was noticed at the same time in Budhipadar bay at 220kV Tarkera s/s and all feeders emanating from substation were hand tripped. Preliminary report has been furnished by OPTCL. Tripping of 220kV bus coupler at Budhipadar needs to be deliberated vis-à-vis the present overcurrent relay settings.

Deliberation in the meeting

OPTCL representative was not present in the meeting. However they conveyed their view through a letter dated 26.06.2008, which is as follows :

At 13:30 Hrs on 18.05.2008 220 KV Budhipadar – Tarkera ckt - II tripped at both ends on E/F. Subsequently the other ckt. tripped on over current relay indication. The power flow through the bus coupler prior to tripping of Tarkera feeder was to the tune of 250 MW. Due to tripping of Tarkera feeder I & II there was a transient increase of power flow through the bus coupled causing its tripping on high set of element of over current relay, although the flag did not operate due to mechanical problem. The isolation of Tarkera and Bus-I caused high voltage at Budhipadar 220 KV bus resulting tripping of 220 KV Budhipadar – Burla feeder I & II on over voltage relay indication. The over voltage setting of the above feeders are 120 %. The schematic diagram indicating the sequence of events and power flow are enclosed herewith for reference. The CT ratio and Relay setting of Bus Coupler breaker are 1200/1 and 120% respectively.

DGM, ERLDC observed that the power flow through Budhipadar s/stn over the last six months has changed (power is being imported instead of export from Budhipadar s/stn). He apprehended that with the addition of new CPPs in adjacent Sundargarh district there might be evacuation constraint and stressed on the need of detailed planning for power evacuation through Budhipadar s/stn. in consultation with WR.

III. At 15:15 hrs of 23.05.08 400kV Meramundali-Jeypore S/C tripped reportedly on receipt of DT from Meramundali. At Meramundali s/s 2x315 MVA ICTs and 400kV TSTPP-Meramundali-I tripped while 400kV TSTPP-Meramundali-II remained in floating condition. OPTCL reported no loss of load/ generation as a result of above trippings other than temporary line overloadings. On tripping of 400kV Meramundali-Jeypore s/c PDO operated at HVDC Gazuwaka to bring down power order from 900MW to 500MW. Power sharing before receipt of PDO at HVDC Gazuwaka was 400MW in Pole-I and 500MW at Pole-II. PDO ramped Pole-II power down to 100MW. However, at around 15:25 hrs at Pole-I all filters tripped and Pole-I got blocked with around 145MW power in Pole-II. Consequently, power flow at HVDC Gazuwaka sustained at 500MW for short time only before dropping to 145 MW.

OPTCL/Powergrid may furnish further details.

Deliberation in the meeting

OPTCL representative was not present in the meeting. However they conveyed their view through a letter dated 26.06.2008, which is as follows :

At 15:10 Hrs on 23.05.2008 the following feeders tripped at Meramunduli

- a. 400 KV Meramunduli-TSTPS ckt-I with Gr-A & B trip relay indication**
- b. 400 KV Meramundli-Jeyapore line with DTT,Gr A & B Trip relay indication.**
- c. ICT-I & II with LBB start, Gr - A & B trip Relay.**

The above tripping has not caused any reschedule of load/generation in OPTCL system except temporary over loading of transmission lines.

IV. At 12:02 Hrs of 05.06.08 400kV Purnea - Binaguri-III (ckts.- II & IV were previously open on overvoltage tripped on Ph-Ph fault. Subsequently, at 12:09 Hrs following a series of events all 400kV lines between Purnea-Binaguri section tripped. Simultaneously, 220kV Siliguri-Dalkhola D/C tripped on Distance Protection and CHPC/Rangit/Binaguri/Birpara/Tala/ Teesta alongwith NER system got isolated from the combined grid with system frequency of the isolated grid rising to 51.39 Hz. Immediately thereafter all lines / units from Tala tripped followed by Teesta HEP. All running units at Rangit HEP also tripped. CHPC however survived alongwith Birpara/Binaguri and NER systems. At 12:27 Hrs 400kV Purnea-Binaguri-III was charged but tripped on SOTF. At the same time all the remaining 400kV & 220kV lines from Binaguri tripped. Isolated systems were synchronized at 220kV Binaguri s/s and machines at Tala/ Teesta brought onto bar. 400kV Purnea- Binaguri -IV & I were brought into service at 13:49 Hrs and 14:09 Hrs while ckts II & III normalized on 06.06.08.

With the onset of monsoons total export at Binaguri point considering full generation / injection from NER/Tala/CHPC/Teesta/ Rangit is expected to be high. Considering that tripping of any one circuit between Binaguri-Purnea may lead to a contingency situation, the following points need to be deliberated /noted w.r.t above incident:

- a. In case of tripping of any of the circuits between Binaguri-Purnea the Shift-in-charge at Binaguri should immediately report the same directly to ERLDC to enable control of flows by way of generation reduction without any delay.
- b. To enable faster restoration of generation at Tala, it is felt that immediately on outage of all units, Tala and CHPC may coordinate to get Malbase-Tala extended for bringing units at Tala on bar. However, generation at Tala should be increased in consultation with ERLDC only.
- c. At 12:27 Hrs tripping of all lines from Binaguri occurred even though SOTF relay operated. This may be deliberated.

Deliberation in the meeting

DGM, ELDC urged that on outages of all the Tala units, Tala & CHPC should co-ordinate to get Malbase – Tala extended as Malbase – Tala is a short line.

GM, ERLDC stressed on better & close co-ordination among the various agencies in order to avoid delay in restoration. He mentioned that 40 minutes were lost due to lack of proper co-ordination among the agencies. He requested THPA to keep ERLDC informed of any emergency situation arising in Tala well in advance so that appropriate action can be initiated in time.

- v. At 14:40 Hrs of 09.06.08 220kV Joda-Jamshedpur tripped on E/F (220kV CTPS-Bokaro'B' was under outage due to tower collapse). 132kV Bokaro'B' –CTPS D/C also tripped. As a result Bokaro'B' alongwith associated loads got islanded and all running units at Bokaro'B' unit# 1,2,3 tripped.

DVC may please furnish detailed report.

Deliberation in the meeting

DVC representative stated that the disturbance on 09.06.08 is under examination and the report of the disturbance will be submitted shortly.

- VI. At 15:33 Hrs of 07.06.08, Jeypore-Gazuwaka line-I tripped on Y-N transient fault and successfully Auto reclosed. Simultaneously, 220kV Jeypore-Jeynagar D/C tripped at Jeynagar end only on distance protection, zone-III. Undesired tripping of 220kV Jeypore-Jeynagar D/C creates a contingency considering the following:

- a. In the monsoons the lines may be loaded and tripping of the same would lead to a contingency.
- b. Reduction in short circuit MVA levels of 400kV Jeypore bus occurs on tripping of the lines leading to wide voltage fluctuations which may cause undesired tripping of lines.
- c. Tripping of 220kV Jeypore - Jeynagar leads to immediate ramp down of power vide activation of PDO at HVDC Gazuwaka which may cause further fluctuation in bus voltages.

OPTCL/Powergrid may deliberate the issue.

Deliberation in the meeting

OPTCL representative was not present in the meeting However they conveyed their view through a letter dated 26.06.2008, which is as follows :

At 15:33 Hrs. of 07.06.2008, 220 KV Jeypore–Gazuwake ckt.-I tripped on Y-N transient fault and successfully auto reclosed. Simultaneously,

220 KV Jeypore-Jaynagar D/C line tripped at Jaynagar end on D/P

relay, Zone-III. As ascertained from Jaynagar the D/P relay setting at Jayanagar is 225 % and time setting is 1500 milliseconds. The above incident may be analyzed with the report of PGCIL.

ITEM NO: 6 IMPLEMENTATION OF RECOMMENDATIONS OF PROTECTION COMMITTEE BY BSEB/JSEB

The 5th Protection Sub-Committee of ERPC was held at Siliguri on 23.05.08. Minutes of the above meeting was circulated vide letter no. ERPC/SE (OPRN)/PROTECTION/2008/1340-67 dated 09.06.2008.

A meeting on SPS for Talcher-II STPS under pole outage of Talcher-Kolar HVDC line was held on May 29,2008 in CEA, New Delhi. The meeting was chaired by Member (Power System),CEA.

Members may please note.

Deliberation in the meeting

Members noted the above. The minutes of the meeting on SPS for Talcher – II STPS under pole outage of Talcher – Kolar HVDC line is enclosed in Annexure – V.

ITEM NO: 7 OPERATIONAL PLANNING

(A) REVIEW OF SHUTDOWN PROPOSALS, AS APPROVED IN LAST (26TH) OCC MEETING OF ERPC vis-à-vis ACTUAL SHUTDOWN/ NORMALISATION OF THE TRANSMISSION SYSTEM FOR MAY' 2008

The actual shutdown as availed by the constituents on the basis of finalised programme during the month of May '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. The actual shutdown as availed by the constituent is depicted in Annexure – III A.

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

The shut down proposals which are received by ERPC for the month of July' 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 July,08 are indicated in Annexure – III B.

(C) LGBR FOR THE MONTH OF JUNE & JULY (FOR THE YEAR 2008-09)

Anticipated Peak Demand (MW) and Energy Requirement (MU) for the months of June & July '08

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the months of June & July '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.

However, as per open access regulations, customers can apply for bilateral transactions upto four months in advance, considering the current month as the first. Accordingly, the concerned RLDCs are required to assess the transfer capabilities of different inter-regional corridors, through system studies, and declare the same in advance. For this purpose, it is essential to have information regarding the surplus /deficit of each control area as well as region as a whole. Constituents are therefore requested to review their respective load-generation balance scenarios three months ahead to facilitate evaluation of transfer capability. Further, since the mismatch of load and generation would vary between peak and off-peak, the load generation picture has to be forecasted for both peak and off-peak conditions. In particular, units and lines (220kV and above) that are planned to be under maintenance three months ahead, also need to be informed, to enable RLDCs make proper assessment of likely power flows along major corridors.

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

Deliberation in the meeting

Members were requested to indicate any change in the peak (MW) and energy (MU) figures of requirement and availability and corresponding surplus / deficit of their respective system for the month of June & July'08 within 10 days. If no feedback is received from any of the constituent the figures indicated in Annexure - IV would be treated as final.

ITEM NO: 8 ISSUE RAISED BY

POWERGRID

a. SYNCHRONISATION OF 220kV PATNA S/S WITH BSEB SYSTEM

At present power is fed to Khagaul /Fatuah in radial mode through 2 Nos. 315MVA ICTs at 400 KV Patna s/s of Powergrid. Normally the load of Fatuah is around 140-170MW and that of Khagaul is 120-130MW. It is proposed to do synchronization of the feeder with the BSEB system for better reliability/improvement of the system voltage.

BSEB/ERLDC may please deliberate.

Deliberation in the meeting

BSEB representative agreed to hold meeting with Power Grid & ERLDC to settle the issue.

b. PROVIDING LOCAL MVAR COMPENSATION AT FATUAH AND KHAGAU STATIONS OF BSEB

BSEB is drawing power from Patna s/s through the Fatuah and Khagaul grid in radial mode. Normally MVAR drawal in Fatuah line (with 140-170MW load) is 80-90 MVAR and in Khagaul line (with 120-130MW load) is 40-50 MVAR. BSEB is facing low voltage problem at Fatuah and Khagaul areas. Tap position of the ICTs at Patna s/s had already been raised from 9b to 11, but much relief has not been got. In order to resolve the under voltage problem BSEB is required to provide local MVAR compensation at Fatuah/Khagaul.

BSEB may please opine.

Deliberation in the meeting

ERLDC opined that after restoration of 220 KV Biharshariff – Fatuah transmission line, low voltage problem will be solved.

c. REPLACEMENT OF OLD ABCBs & ISOLATORS OF PURNEA S/stn

6 Nos. of CBs at 220/132 kV Purnea s/s are of ABCB type (Dalkhola line-I & II, ICT-I & II, Bus Coupler & Bus Transfer). These breakers are not reliable and giving frequent problem and causing interruption of power. The CBs were commissioned in 1996 (22 years old). The ABCBs are required to be replaced with SF6 type CBs. For replacement of the CBs 98 lacs will be required.

Some Isolators at 220 /132 KV Purnea s/s are very old and pneumatic mechanism type. These Isolators are very unreliable. Sometimes due to problem in these Isolators power interruption is there. These Isolators and Earth switches (28 Nos. in 220 KV and 23 Nos. in 132 KV) are required to be retrofitted. Rs. 65 lacs is required for retrofitting work (Isolators Earth sw

itches).

Members may please discuss.

Deliberation in the meeting

BSEB representative requested Power Grid to submit detailed damage report of the isolators. Members in general expressed that the matter may be put up to TCC/ RPC.

ITEM NO: 9 MISCELLANEOUS

A. TOTAL INTERRUPTION IN POWER SUPPLY TO BOKARO STEEL PLANT (BSL) FROM DVC ON 11.06.08

SAIL reported that total interruption in power supply from DVC to Bokaro Steel Plant on 11.06.08 at 10:15 Hrs which caused production in the steel plant for nearly 4 hours. The failure was triggered by fault in 220kV CTPS –Kalyaneswari line. Further, sequence of events indicates that entire CTPS-BTPS got islanded from rest of the grid and subsequently power failed at CTPS which led to total power failure at BSL.

DVC power could be restored at 11:55 hrs with a restriction of 30MW only. This situation continued till 16:50 hours when BSL was allowed to draw 100MVA and normalization of plant operations could be started.

DVC may please opine.

Deliberation in the meeting

In reply to SAIL representative's request that DVC may withdraw restriction on power supply to SAIL, DVC representative expressed that the matter will be settled bilaterally.

ITEM NO: 10 DATE AND VENUE OF THE NEXT (28th) OCC MEETING OF ERPC

It was decided that the next (28th) OCC meeting of ERPC will be held on 16.07.2008 (Wednesday) at ERPC, Kolkata.

The meeting ended with a vote of thanks to the Chair.

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ANNEXURE—I

LIST OF PARTICIPANTS IN THE 27th OCC MEETING HELD AT ERPC, KOLKATA ON 20.06.2008

Sl. No.	ORGANISATION	NAME	DESIGNATION
1.	BSEB	Shri G.K.CHOUBEY	EEE /SLDC
		Shri S.K.SENGUPTA	EEE
2.	JSEB	Shri A.K.CHATTERJEE	CE
		Shri D.N.RAM	CE/PATNA
		Shri A.KUMAR	EEE
3.	DVC	Shri D.MUKHERJEE	CE (E) /CLD
4.	WBSETCL	Shri D.GANGULY	CE/SLDC
		Shri A.BISWAS	SE(E)
5.	WBSEDCL	Shri P.MUKHOPADHYAY	ADDL.CE
6	WBPDC	Shri A.K.DE	DGM(O)/CORPORATE
7.	CEC	Shri R.CHAKRAVARTY	MANAGER
8.	NTPC	Shri L.AGARWAL	AGM(OS)
		Shri S.DASGUPTA	DGM, FSTPS
		Shri A.R.BHUNIA	SR.MGR
9.	SAIL	Shri A.MUKHOPADHYAY	MANAGER(O)/SLCC
		Shri R.PANDEY	SR.MGR
10.	TATA POWER	Shri B.HANSDAL	SR.EXECUTIVE(O)

		Shri B.S.GOGOI	SR. OFFICER
11.	TALA HEP	Shri T.PERRY ANNAN	EE(O)
12.	DGPC	Shri M.PRASAD	AEE(O&M)
13	CHPC/BHUTAN	Shri K.K.BHATTRAI	SE(O)
14.	KHPC/BHUTAN	Shri T.DUKPA	SO (O)
15.	PTC	Shri K.S.BHATTACHARYA	ADVISOR
16.	POWERGRID	DR. L.HARI	GM(O &M)/ ER-I
		Shri B.K.PRADHAN	CH.MGR /ER-II
		Shri S.J. LAHIRI	CH.MGR- ER-II
		Shri G.P.SINGH	AE
17.	ERLDC	Shri M.G.RAOOT	GM
		Shri D.K.SRIVASTAVA	DGM(O)
		Shri P.MUKHOPADHYAY	DGM
		Shri S.KONAR	DY.MGR
		Shri S.CHOHAN	ENGR.
		Shri T.MAHAPATRA	ENGR.
		Shri P.S.DAS	MGR.
18.	ERPC	Shri R.K.GROVER	MS – in –Chair
		Shri J.BANDHOPADHYAY	SE
		Shri S.N.KAYAL	SE
		Shri B.SARKHEL	EE
		Shri S.K.GHOSH	EE
		Shri A.ROY	EE
		Shri S.P.DATTA	DGM/NTPC
		Shri D.K.MITRA	EE
		Shri K.K.BHATTACHARYA	EE
		Shri S.S.GHOSH	EE
		Shri S.M.JHA	EE
		Shri P.N.SARKAR	AD-I
		Shri S.KEJRIWAL	AD-I

ANNEXURE- III B

Programme of Maintenance Of Transmission Lines And Generating Units as approved for the month of July, 2008

Organization	Name of the Element	From		To		Remarks
		Date	Time	Date	Time	
FSTPS,NTPC	Unit No.- III (200MW)	25-06-.08		27.07.08		Unit Overhauling
	Unit No. - V (500MW)	30.07.08		31.07.08		Unit Overhauling BSEB representative requested NTPC to take Unit – V (500 MW) first for over hauling instead of Unit – III. NTPC expressed its inability to make such change.

KhSTPS,NTPC	Unit No-III	16.07.08		31.07.08		Annual Maintenance
DVC						
BTPS - B	Unit# I (210MW)	21.06.08		20 days		Annual O/H
MTPS	Unit# II (210MW)	10.07.08		40 days		Capital O/H
WBPDC						
BTPS	Unit# IV	23.06.08		31.07.08		Short Maintenance
KTPS	Unit# II (210MW)	01.07.08		30.07.08		Boiler O/H, T/G Brg. Inspection
Bakreswar	Unit III (210 MW)	01.07.08		30.07.08		Short Maintenance
DGPC,CHP	Unit # I	26.06.08		09 to17=00 Hrs		Periodic Maintenance work
	Unit # II	25.06.08		- do-		
	Unit # III	23.06.08		-do-		
	Unit # IV	24.06.08		-do-		
PROLONGED SHUTDOWN OF UNITS IN THE CONSTITUENT SYSTEMS						
OHPC Chiplima	Unit- III	04.11.06		TO CONTINUE		Abnormal Sound in turbine
JSEB PTPS	Unit-III	01.08.03		TO CONTINUE		Boiler renovation
	Unit -IV	17.09.05		TO CONTINUE		Boiler renovation &TurbineO/H
	Unit- V	23.05.04		TO CONTINUE		Boiler renovation
	Unit -VIII,IX,X	17.10.05		TO CONTINUE		Capital Maintenance
Tenughat TPS	Unit-I (210MW)	13.06.07		End of June,2008		Capital Maintenance

ODB: On daily basis , OCB: On continuous basis