EASTERN REGIONAL POWER COMMITTEE

14, GOLF CLUB ROAD, TOLLYGUNGE

KOLKATA-700033

MINUTES OF THE 34th OCC MEETING HELD AT ERPC, KOLKATA ON 13.01.2009 (TUESDAY) AT 11:00 HRS

List of participants is enclosed in Annexure-I.

Shri R. K. Grover, Member Secretary, ERPC welcomed the delegates in the 34th OCC meeting. He expressed that grid frequency remained stable & better in December, 2008 as compared to November, 2008. He reviewed the overall power position of the Eastern Region.

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 33rd OCC MEETING OF ERPC HELD AT ERPC, KOLKATA ON 17.12.2008

The minutes were circulated vide letter no. ERPC / SE (OPRN)/ OPERATION/2008/5326-71 dated 26.12.2008.

No comment has been received from any of the constituents. Hence the minutes of the above meeting is confirmed.

ITEM NO. 2 REVIEW OF THE GRID PERFORMANCES DURING DECEMBER, 2008 ERPC HELD AT ERPC, KOLKATA ON 17.12.2008

2.1 POWER SUPPLY POSITION :

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

- From comparison of the generation figures of' December'08 with November'08, it is observed that the net energy generation (MU) in Eastern Region (including contribution of Bhutan) has increased on per day average basis.
- The net peak demand met has decreased from 10,635 MW to 10,545 MW
- The demand met during December'08 has decreased by 90 MW, as compared to November'08. The percentage of Peak shortage of ER has decreased marginally.

The above variations are considered normal.

2.2 FREQUENCY:

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

	% of time of the month frequency remained			
Month	**<49.0 Hz**	**49.0-50.5 Hz**	**50.5-51 Hz**	**>51.0 Hz**
November'08	1.18	98.82	0.00	0.00
December'08	**0.63**	**99.31**	**0.06**	**0.00**
December,07	12.17	87.83	0.00	0.00

*****Maximum (Inst.) Frequency : **50.65 Hz** on 18.12.08 at 03:16Hrs
Minimum (Inst.) Frequency : **48.80 Hz** on 04.12.08 at 14:15 Hrs & on 05.12.08 at 14:20 Hrs & on 06.12.08 at 18:11 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 December'08 has increased as compared to the previous month i.e. November'08 and with respect to the corresponding month of the previous year (i.e. December'07).
- The percentage of time frequency below 49.0 Hz has decreased to 0.63 % in the month of December' 08, as compared to 1.18 % in November'08 and to the corresponding month of the previous year (i.e.December'07).
- The percentage of time frequency remained above 50.50 Hz in the months of Decermber'08 is insignificant.

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

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

Members may please discuss.

Deliberation in the meeting

Members noted the above.

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	436	415
400 kV BINAGURI	437	411
400 kV BIHARSHARIFF	428	404
400 kV DURGAPUR	425	408
400 kV PATNA	435	395
400 kV JEERAT	425	389

It may be noted that during the month of December' 08, voltages at Binaguri, Purnea, Patna, Biharshariff, Durgapur & Jeerat s/s remained on higher side, whereas minimum voltage (389 KV) at Jeerat s/s was observed on lower side particularly during peak hours.

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 December'08.

2.5 WATER LEVEL IN MAJOR HYDRO RESERVOIRS IN THE EASTERN REGION DURNG DECEMBER' 2008

Name of the Reservoirs	Level in mtrs. on last day of the month	
	31.12.08	**31.12.07**
Hirakud	189.67	189.75
Balimela	448.67	457.32
Rengali	119.3	117.93
Upperkolab	851.7	853.66
Indravati	636.8	637.61
Subarnarekha	N/A	N/A

Members may please note and discuss.

Deliberation in the meeting

Members noted the above

EM NO. 3 Important Events

1. KhSTPP Unit-VI (Stage-II) was declared commercial w.e.f 00:00 Hrs of 30.12.08 and revised allocation of power for KhSTPP (Stage –I) and FSTPP were implemented accordingly.

2. (a) 400kV Ranchi-Sipat-II was charged for the first time from Ranchi end at 19:48 Hrs of 31.12.08. The line was later charged from Sipat end and synchronised at Ranchi end at 13:12 Hrs of 01.01.09.

   (b) 400kV Ranchi-Sipat-I was charged for the first time from Ranchi end at 11:51 Hrs of 03.01.09. The line was then later charged from Sipat end and synchronised at Ranchi end at 12:51 Hrs of 03.01.09.

Deliberation in the meeting

Members noted the above.

ITEM NO. 4A 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	***Powergrid committed during the last OCC bring the ICT by end of January'09. PowerGrid may please intimate the present status*** Powergrid representative informed that dehydration of the said transformer has already started7 the transformer is Expected by 10th of February,2009.
2.	150 MVA ICT-I at Bodhgaya	04.03.08	Fire hazard in Bodhgaya S/Stn.	***Procurement of new 150MVA ICT in progress. Expected by April, 2010.*** The 150 MVA ICT has been replaced by another ICT on 29th December.
Prolonged Outage				
1.	220/132 Kv, 100MVA ICT-I at Fatuah	22.04.2002	Problem in Transformer winding	***Expected by January,2009.***

ITEM NO. 4B Major units outage /Maintenance:

STATION	NO.	CAPACITY	DATE	REASONS FOR OUTAGE
Kolaghat	4	210	09.10.08	GT Maintenance
Kolaghat	6	210	26.11.08	Stator Earth Fault
Santaldih	5	250	04.01.09	Due to Coal Shortage
Bakreshwar	4	210	21.11.08	Ash Problem
Mejia TPS	6	250	06.01.09	Main Oil Tank Leakage
Waria	4	210	04.01.09	Bottom Ash Problem

Constituents are requested to furnish latest status including expected date of restoration.

Deliberation in the meeting

Members noted the above.

ITEM NO. 5 GRID INCIDENCES IN ER SYSTEM DURING DECEMBER'08.

I. Repeated disturbances in South Orissa system on 14.12.08:

On 14.12.08 at 09:52 Hrs all 220 kV feeders from Jeynagar, 400kV TSTPP-Meramundali-I,400 kV Rengali- Indravati-Jeypore section, 400 kV Indravati-Indravati, 2x315 MVA ICTs at Jeypore tripped (220kV Bhanjanagar-Theruvalli-I was under shutdown). ICT-I tripped on directional E/F on 400kV side while ICT-II tripped with E/F protection on 220kV side. 400 kV Meramundali-

Jeypore autoreclosed successfully on B-Ph fault. Running units at Balimela and Indravati also tripped with disruption of load at Jeynagar, Theruvali, Narendrapur. 400kV Jeypore-Gazuwaka-I tripped at 10:55 hrs while Gazuwaka –Pole-II tripped at 11:00 hrs on low DC voltage trip. All tripped lines were restored by 12:27 Hrs. Again at 14:04 Hrs due to tripping of 220kV/400kV lines emanating from Jeynagar, Theruvalli, Indravati, Jeypore all the mentioned 220/400kV substations became dead. Generation loss at Indravati, Balimela occurred on tripping of running units with disruption of load at Jeynagar, Theruvali, Narendrapur. Both Poles at HVDC Gazuwaka also tripped. All tripped lines/HVDC Gazuwaka Poles were restored by 18:07 Hrs. The similar event also occurred on 05.12.08 in which the entire south Orissa system was collapsed, which was discussed during the last OCC.

It is felt that in both the cases a transient fault which could not be cleared in time lead to cascade trippings. OPTCL/ Powergrid may deliberate further on location of the fault and measures for ensuring proper protection coordination for preventing occurances of such cascade tripping. It may be noted that repeated trippings of similar nature have been occurring in the past in South Orissa system.

Deliberation in the meeting

OPTCL representative informed that a protection committee has already been formed to look into the matter. The findings of the committee will be communicated later.

GM, ERLDC expressed that the above repeated trippings of the power system in South Orissa should be investigated in close co-ordination with ERLDC & Powergrid.

MS, ERPC suggested that a committee consisting of member from ERLDC, Powergrid & ERPC may be constituted under Director (ENGG), OPTCL to look into the repeated occurrences cascade tripping in South Orissa.

II. Tripping of all units at KTPP on 22.12.08:

On 22.12.08 at 11:15 Hrs a 3-Ph fault in 220kV KTPP-Howrah-I led to tripping of all lines /units on 220kV bus including 220kV KTPP-Howrah-I, 220kV KTPP-Howrah-II, 220kV KTPP-Haldia D/C, all running units on 220kV KTPP Bus viz. Units#1,2,3., 400/220/33kV ICTs at KTPP. Unit# 5 running on 400kV KTPP bus (Unit # 4, 6 were previously out of bar) also tripped with a delay of 5 minutes (approx). KTPP Units# 5 was synchronized at 12:11 Hrs and all other tripped lines/units (except 220kV KTPP-Howrah-I) were restored by 14:00 Hrs. Jumper snapping of 200kV KTPP-Howrah-I line was reported and the line was restored next day after patrolling and rectification of jumper snapping.

As per report received from KTPP,220kV Main Bus-II was under shutdown for facilitating work on 220kV main Bus-II isolator of 220kV KTPP-Howrah-I and the line was kept on Transfer bus. Accordingly only 220kV main bus-I only was in service. Subsequently, a 3-Ph fault (caused by jumper snapping) in 220kV KTPP-Howrah-I resulted in fault feeding by all other lines/ICTs/Units on 220kV Bus-I leading to tripping of lines and units on 220kV side. While Generator Unit# 1,2,3 tripped on backup impedance relay,2x315MVA ICTs I & II tripped on overcurrent in R,Y,B-Ph with 86-Lock out relay on 220kV side. On opening of 220/400kV breakers of ICT-I & II, 33kV supply was disrupted resulting in tripping of station Auxiliary Transformer A & B. Due to loss of auxiliary supply, Unit # 5 on 400kV side(Unit # 4 & 6 were out of bar) tripped through Primary Air pressure low interlock after a time delay of approx. 5 mins.

1. Line fault in 220kV KTPP-Howrah-I not being cleared at KTPP end and getting transferred to Main bus-I

2. It has been observed that in the past such incidents of total outage of all running units at KTPP on loss of Auxiliary have occurred on tripping of ICTs-I & II. The problem needs to be deliberated to ensure a more secure/stable auxiliary supply system which is not interrupted due to tripping **of ICTs.**

Members may deliberate.

Deliberation in the meeting

WBPDCL representative informed that auxiliaries of KTPP units (other than compressors) get supply from station bus & not from unit bus hence any disturbance in the station bus will cause the tripping of the units. He also added that this provision is as per design of the auxiliary power supply system unique to this station.

ITEM NO. 6 OPERATIONAL PLANNING

(A) REVIEW OF SHUTDOWN PROPOSALS, AS APPROVED IN LAST (33rd) OCC MEETING OF ERPC vis-à-vis ACTUAL SHUTDOWN/ NORMALISATION OF THE TRANSMISSION SYSTEM FOR DECEMBER' 2008

The actual shutdown as availed by the constituents on the basis of finalised programme during the month of December '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 JANUARY'09.

The shut down proposals which are received by ERPC for the month of January' 09 are given at **Annexure – III B**.

Members may please discuss and finalize the proposed programme.

Deliberation in the meeting

Members noted the above.

(C) LGBR FOR THE MONTH OF JANUARY'09 & FEBRUARY'09 (FOR THE YEAR 2008-09)

Anticipated Peak Demand (MW) and Energy Requirement (MU) for the months of January'09 & February'09.

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the months of January'09 & February'09 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

Members noted the above.

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

Constituents are requested to furnish coal stock position in their power stations & figures for loss of generation due to shortage of coal on daily basis indicating total daily loss of generation in MU and maximum loss of generation in MW during peak hours of the day.

Sl. No	Name of Constituents	Coal Stock Position	Loss of Generation Figures
1.	BSEB	Not Furnished	Not Furnished
2.	JSEB	-DO-	-DO-
2.	TVNL	-DO-	-DO-
3.	WBPDCL	-DO-	-DO-
4.	CESC	-DO-	-DO-
5.	OPDCL (Ib TPS)	196772 MT against daily requirement of 8500 MT	-DO-
6.	NTPC	Not Furnished	-DO-
7.	DVC	-DO-	-DO-

Deliberation in the meeting

Member Secretary advised the constituents to submit the data before every OCC so that the issue can be deliberated fruitfully.

Constituents assured to submit the coal stock position in their power stations & loss of generation due to shortage of coal before OCC.

ITEM NO. 8 Furnishing of Event Logger and Disturbance Recorder printouts and implementation of time synchronisation facility for ER substations

In case of any major grid incidence/disturbance ERLDC requests for Event Logger and DR printouts alongwith all relay indications from the affected substations. However this is rarely compiled with. It may be noted that furnishing of such information to ERLDC is mandatory as per IEGC Clause 5.2(q)-

"The Regional constituents shall send information/data including disturbance recorder/sequential event recorder output, etc to RLDC for purpose of analysis of any grid disturbance/event. No regional constituent shall block any data/information required by the RLDC for maintaining reliability and security of the grid and for analysis of event."

All constituents are accordingly requested to send above data as and when asked for by ERLDC to enable proper analysis of Grid disturbance/incidences.

It may also be relevant to note Clause 4.11 of IEGC-
"Recording instruments such as Data acquisition system/ disturbance Recorder/Event Logger/ Fault Locator (including time synchronization equipment) shall be provided in the ISTS for recording of dynamic performance of the system."

All constituents are accordingly requested to ensure availability of DRs/ ELs /Fault Locators at substations with GPS facility to enable proper listing of the complete sequence of events for analysis of grid disturbances / incidents.

Deliberation in the meeting

Members noted the above.

ITEM NO. 9 TRIAL OPERATION BY-PASSING HVDC SASARAM

As informed during the last OCC AC by-pass at HVDC Sasaram was taken in to service on 01.12.08 at 10:00 hrs, there by establishing one more pair of synchronous ties between ER and NR; viz 400kV Sasaram-Sarnath and Sasaram-Allahabad. Further, in order to ensure prompt reversal AC by-pass to HVDC, the converter was taken back to service from 10:27 hrs to 18:28 hrs of 10.12.08 and from 18:10 hrs to 08:40 hrs of 24.12.08. The by-pass operation is running smoothly.

Deliberation in the meeting

Members noted the above.

ITEM NO. 10 ISSUE RAISED BY

NHPC

TEESTA –V POWER STATION-HIGH VOLTAGE IN TEESTA-BINAGURI 400Kv CIRCUITS

NHPC intimated that they were facing continuous high voltage problem in Teesta-Binaguri 400kV Circuit # 1 & 2 since its commissioning. This had been brought into notice at different forum time to time and no action is being taken by M/s PGCIL to maintain the voltage at appropriate level. Most of the time, the line voltage has been observed between 425kV to 435kV, before the synchronization of generating units and between 415kV to 425kV after the synchronization of their generating unit with the grid. The hourly data of line voltage, noticed during the period of the April'08 to Dec'08 is enclosed for reference. 400kV equipments are subject to over stressed due to the continuous high voltage in the line.

Deliberation in the meeting

Powergrid representative informed that installation of 2 x 125 MVAR Bus Reactor at 400 KV Binaguri S / Stn is in pipeline. After installation of the reactor the over voltage problem will be over come to great extent.

SOUTH EASTERN RAILWAY

POWER SUPPLY INTERRUPTION FROM OPTCL AT RAILWAY TRACTION SUBSTATIONS / FEEDING STATIONS

S.E Railway avails power supply from OPTCL at 10 points namely Jaleswar, Balasore under Kharagpur division and Barajamda, Rourkela,

Bhalulata,Chandiposh, Nawagaon, Rajgangpur, Bamra & Jharsuguda under Chakradharpur Division.

Due to repeated & prolonged interruptions of power supply, S.E.Railway is seriously concerned about the reliability for the traction power supply by OPTCL. The traction power supply failures are in increasing trend. There were 431 cases of power supply failure, involving 451 hrs. during 2008-09 (April'08 to November'08) (copy enclosed)

Out of 431 cases of supply failure maximum interruption of power supply was in the jurisdiction of Rourkela, Rajgangpur & Bamra TSS, i.e. 150,61 & 67 cases respectively.

In the recent past, modification was made and Bhalulata TSS was getting feed from Tarkera through Rourkela grid s/s, which was reliable. But on 09.12.08 further modification was made and Bhalulata TSS has been connected to Rourkela-Nalda transmission line for availing Joda supply. Subsequently, within a spell of 7 days same transmission line became faulty, resulting no power supply available for more than 30 hrs. Earlier arrangement of availing supply from Tarkera via Rourkela may please be restored.

Apart from the above, there were instances when 2 to 3 traction sub-stations failed simultaneously.

The jurisdiction of Bhalulata,Rourkella, Rajgangpur & Bamra TSS is on density trunk route, carries heavy traffic of freight, mail and express trains of important routes.

The poor, un-reliable power supply in the jurisdiction Bhalulata, Rourkela, Rajgangpur & Bamra TSS are serious cause of concern. Frequent & prolong interruptions adversely affected the movement of train services. Mail/ express trains were badly detained in the section. Several correspondences were made but no fruitful result has yet been observed.

Uninterrupted and reliable traction power supply at 10 points of supply may be ensured by OPTCL.

Deliberation in the meeting

Member Secretary, ERPC after discussion with OPTCL suggested that the matter may be discussed first with GM, OPTCL, Burla/ Director (Engg), OPTCL & then in OCC.

WBSETCL

WBSETCL has implemented Microwave Communication System and is bring exclusively used for integrated power system operation of SLDC. The part of the Microwave System is also utilized by the Generating units and ERLDC for effective operation of the Eastern Region and National Grid. The Microwave system of WBSETCL operates in 2.3-2.5 GHz frequency band for which WBSETCL has invested to the tune of Rs.15 (fifteen) crores.

Wireless Planning Commission (WPC) vide their letter dated 24.11.2008 (copy enclosed) had requested WBSETCL for surrendering of the frequency range 2.3-2.4 GHz band as this band has been allocated for Broadband Wireless Access (BWA) service by DoT. In case the instruction of WPC is immediately implemented, the operation of SLDC and ULDC for effective techno-commercial activities of the power system management will be stopped resulting in total disruption of real time operation of the State Transmission System and will also affect the National Grid operation.

However, considering the importance of the situation arisen by the request WPC, WBSETCL has taken action to switch-over to Optical Fiber Communication system in integrated manner with PGCIL as replacement of existing Microwave Communication System. The entire implementation of the scheme may take 2 to 3 years time. The additional expenditure to be incurred by WBSETCL could be to the tune of Rs. 28 crores which will be a considerable burden on WBSETCL and may affect the future developmental programme of the company.

The matter was discussed in details in the 8th TCC meeting of ERPC held on 20.11.2008 at Bodhgaya and it was agreed that all constituents including WBSETCL would approach to Ministry of Power, Govt of India through respective State Government for funding the tentative project cost to the tune of Rs.28 crores for WBSETCL by the Central Government.

Deliberation in the meeting

Member Secretary advised all the constituents to approach to Ministry of Power, Govt. of India through respective State Government for funding the project cost.

ITEM NO. 11 STATUS OF NEW LINES /UNITS UNDER CONSTRUCTION

The updated status of the following important lines/generating stations under construction may be furnished:

Sl. No.	Power Stations	Units	Date of Commissioning
1	Barh STPP	Unit #1,2,3 (660 MW each) Unit # 4,5 (660 MW each)	***NTPC representative informed that the Barh units will not be commissioned in this financial year i.e. 2008-2009***
2	400 KV Durgapur – Jamshedpur 2nd circuit		***May, 2009***
3	400 KV Durgapur – Maithon S/C		***September, 2009***

Deliberation in the meeting

Members noted the above.

ITEM NO. 12 DATE AND VENUE OF THE NEXT (35th) OCC MEETING OF ERPC.

Next (35th) OCC meeting will be held at NTPC, Farakka on 20.02.2009 under the aegis of NTPC. ***Date of the meeting would be notified shortly.***

****

Annexure-I

LIST OF PARTICIPANTS IN THE 34TH OPERATION COORDINATION COMMITTEE MEETING (OCC) OF EASTERN REGIONAL POWER COMMITTEE (ERPC) HELD ON 13.01.2009 AT ERPC KOLKATA

ORGANISATION	NAME	DESIGNATION
WEST BENGAL		
WBSETCL	Shri D.GANGULY	CE /SLDC
	Shri A.BISWAS	SE/SLDC
WBSEDCL	Shri M.S.PAL	DY. CE(COMML)
	Shri P.P.BISWAS	SE, ALDC
WBPDCL	Shri R.N. SAHA	DGM(O)
	Shri A.K.DE	DGM(CORP)
	Shri G.MAJI	SM(PS)
CESC	Shri R.CHAKRABORTY	MANAGER
ORISSA		
GRIDCO		
OPTCL	Shri B.N.MAHAPATRA	SR.G.M(PS)/SLDC
	Shri S.K.DAS	AGM/SLDC
OPGCL	Shri S.MOHARANA	MANAGER
OHPC	Shri B.C.PADHI	SR.GM(E)
DVC	Shri D.MUKHERJEE	CE-I(E)/CLD
	Shri P.K.DUTTA	DY.CE(CTC)
NTPC	Shri RAM NIWAS	AGM(OS)
	Shri RAKESH KUMAR	DGM(OS)
NHPC	Shri S.ADHIKARI	SR.MGR(E)
	Shri H. SAHA	DY.MGR (E)
POWERGRID		
ERTS-I	Shri S.K.PRAMANIK	DGM(OS)
	Shri S.K.SINGH	GM(OS)
POWERGRID		
ERTS-II	Shri B.K.PRADHAN	CH.MGR(OS)

PGCIL	**Shri G.P.SINGH**	**AE**
BHUTAN		
CHPC	**Shri TENZIN DORJI**	**AEE**
KHPC	**P.DORJI**	**AE (E)**
	SUJAN	**HEAD O & M**
SAIL	**Shri T.BANERJI**	**AGM(O)**
ERLDC	**Dr. L.Hari**	**GM**
	Shri D.K.SRIVASTAVA	**DGM**
	Shri P.S.DAS	**MANAGER**
ERPC	**Shri R.K.GROVER**	**MEMBER SECRETARY**
	Shri S.N.KAYAL	**SE (O)**
	Shri B.C.MALLICK	**SE (PS)**
	Shri S.S.GHOSH	**EE (DDO)**
	Shri A.ROY	**EE(C)**
	Shri S.K.DEB	**EE (TSC)**
	Shri P.MAZUMDAR	**EE**
	Shri P.N.SARKAR	**AD-I (SPAR)**
	Shri S.KEJRIWAL	**AD-I (C)**
LAISION OFFICER OF BSEB	**Shri S.K.SENGUPTA**	**EEE,BSEB**

ANNEXURE- I I I B

Programme of Maintenance Of Transmission Lines And Generating Units as approved for the Month Of February ' 2009

Organization	Name of the Element	From		To		Remarks
		Date	Time	Date	Time	
NTPC						
400 KV Farakka - Sagardighi Trans. Line		10.02.09	08:00	10.02.09	16:00	Line Maintenance
400 KV Farakka – Jeerat Line # I		17.02.09	08:00	17.02.09	16:00	- DO -
400 KV Bus Reactor – I at Farakka		12.02.09	09:30	12.02.09	17:00	Testing
132 KV Kahalgaon – Lalmatia Trans. Line		11.02.09 (ODB)		11.02.09		Preventative Maintenance
132 KV Kahalgaon – Sabour Trans. Line		18.02.09 (ODB)		18.02.09		- DO -
132 KV Kahalgaon – Kahalgaon Trans. Line		04.02.09		04.02.09		- DO –
400 KV Bus # 2 at Talcher		03.02.09 (ODB)		03.02.09		Yearly Maintenance
400 KV Bus # 4		17.02.09 (ODB)		17.02.09 (ODB)		Annual maintenance
400 KV Bus # 5		19.02.09 (ODB)		19.02.09 (ODB)		-DO-
400 KV Bus # 6		26.02.09 (ODB)		26.02.09 (ODB)		-DO-
220 KV Main Bus # 1		10.02.09 (ODB)		10.02.09 (ODB)		-DO-
220 KV Main Bus # 2		13.02.09 (ODB)		13.02.09 (ODB)		- DO-
PowerGrid ER – I						
400 KV Patna – Balia D/C Line. Ckt. I & II		05.02.09 (OCB)	08:00	08.02.09 (OCB)	16:00	Stringing for crossing of 400 KV Barh - Balia Transmission Line between loc 67b/0 to 67B/1& loc 114/0 to 115/0 under construction head.
400 KV Biharshariff - Muzaffarpur D/C Line Ckt.I & II		11.02.09 (ODB)	08:00	12.02.09 (ODB)	17:00	Stringing for crossing of 400 KV Barh – Balia line under construction head
Power Grid ER - II						
400 KV Malda – N. Purnea Ckt. – I		14.01.09 OCB	09:00	15.01.09 OCB	17:00	For Bypassing Loc no. 893 through ERS
400 KV Malda – N. Purnea Ckt. - II		16.01.09 OCB	09:00	17.01.09 OCB	17:00	-DO-
50 MVAR Bus Reactor at Rourkela S/S		05.02.09 (OCB)	09:00	05.02.09 (OCB)	17:00	Annual Maintenance
400 KV Rourkela – Raipur Ckt.- I		09.02.09 (OCB)	09:00	09.02.09	17:00	- DO – Subject to clearance from WR

400 KV Rourkela – Raipur Ckt. - II	10.02.09 (OCB)	09:00	10.02.09	17:00	- DO – Subject to clearance from WR
220 KV Budhipadar – Korba Ckt. - III	18.02.09 (ODB)	09:00	19.02.09	17:00	- DO – Subject to clearance from WR
50 MVA ICT – IV at Malda S//S	05.02.09		05.02.09		- DO -
50 MVA ICT – II at Malda S/S	12.02.09 (OCB)		24.02.09		For overhauling of ICT
315 MVA ICT at Farakka	10.02.09		10.02.09		Annual Maintenance
WBPDCL					
Kolaghat TPS Unit # 6	26.11.08		For 40 days		Stator Earth Fault
Kolaghat TPS Unit # 4	09.10.08				G.T. Overhauling
Bandel TPS Unit # 3	15.01.09		25.02.09		Short Maintenance
BkTPP Unit # 1	01.02.09		15.02.09		Short Maintenance
OHPC					
Burla Unit # II	05.12.08		05.02.09		Annual Maintenance
Rengali Unit # I	18.08.08		31.03.09		Generator Fault
Unit # III	15.01.09		13.02.09		Annual Maintenance
Upper Kolab Unit # III	09.01.09		09.02.09		Annual Maintenance
Upper Indravati Unit # III	05.01.09		04.02.09		Annual Maintenance
DGPC					
CHPC					
Unit # Ii	01.02.09		28.02.09		Annual Maintenance
Unit # I	20.02.09		28.02.09		Annual Maintenance
PROLONGED SHUTDOWN OF UNITS IN THE CONSTITUENT SYSTEM					
OHPC					
Chiplima	Unit - III	04.1.06	TO CONTINUE		Abnormal
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

ODB: On daily basis , OCB: On continuous basis