

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

MINUTES OF THE 35th OCC MEETING HELD AT FSTPS, NTPC, FARAKKA ON 18.02.2009
(WEDNESDAY) AT 11:00 HRS

List of participants is enclosed in Annexure-I.

Shri K.K. Sharma, GM, FSTPS, NTPC, Farakka welcomed the delegates to the 35th OCC meeting. He thanked Member Secretary, ERPC for giving FSTPS an opportunity, after a long interval to host the OCC meeting at Farakka. He also thanked Shri G.G Despande, ED NTPC, who could find time to attend the meeting despite his busy schedule. He stated that presence of senior officials from the different power organizations of the Eastern Region at FSTPS is a source of inspiration for the entire FSTPS family . He mentioned FSTPS which is a 1600 MW power station is going to be a 2100 MW power station by October, 2010 (3rd 500 MW unit is under construction. He said that the power plant is near to coal mines & water source still it faces shortage of coal & water. NTPC is working on it. He hoped that some solution will emerge. He then requested ED, NTPC to say few words to the delegates.

ED, NTPC mentioned that Farakka is the place where the first power plant of NTPC in the Eastern Region was set up & Eastern region is the only region which supplies power to all the regions in the country. He expressed that OCC reviews performance of the past & plan for the future, it strengthen the relationship among the constituents to build up team spirit. He requested the delegates to make Eastern Region, the best region of the country & thus serve the country in the best way. He stated that, in NTPC Man : MW ratio is 1 & by 2017 NTPC will be a 75000 MW company. NTPC is forming Joint venture company e.g. NTPC with Nuclear Power Corporation He expressed that the Declared Capacity of the FSTPS is being brought down due to coal shortage which is a matter of concern.

Member Secretary, ERPC thanked NTPC, FSTPS, Farakka for making excellent arrangements for holding 35th OCC meeting at NTPC, Farakka. He stated that it was his earnest desire to hold OCC meeting in power station to appreciate the problems faced by the power station. He expressed that, when a thermal power plant is set up two considerations are required to be made. a) Share of Home State should be ensured. b) Electricity should be provided to the place from where the coal is fed to the power plant.

He mentioned that 10% less PLF at FSTPS is a loss not only of NTPC but also of the country.

He asked the constituents to explore the captive power generation from captive power plant having capacity more than 5 MW. In this context he mentioned

that around 2000 MW captive generation capacity is lying idle in Orissa alone. He said that the states should encourage open access.

Member Secretary then requested Shri. S. N. Kayal, SE (operation), ERPC to take up agenda points for discussions.

ITEM NO. 1 CONFIRMATION OF THE MINUTES OF THE 34th OCC MEETING OF ERPC HELD AT ERPC, KOLKATA ON 17.12.2008

The minutes were circulated vide letter no. ERPC / SE (OPRN)/ OPERATION/2009/5799-5845 dated 27.01.2009

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 PERFORMANCE DURING JANUARY, 2009

2.1 POWER SUPPLY POSITION :

The power supply position of Eastern Region for the months of January'09 & December'08 is indicated at **Annexure-I**.

- From comparison of the generation figures of January'09 with December'08, it is observed that the net energy generation (MU) in Eastern Region (including contribution of Bhutan) has increased marginally on per day average basis.
- The net peak demand met has increased from 10594 MW to 10845 MW
- The demand met during January'09 has increased by 251 MW, as compared to December'08. The percentage of Peak shortage of ER has decreased.

The above variations are considered normal.

Members may please note.

Members noted the above.

2.2 FREQUENCY:

The frequency profile of ER for the month of January'09 and for the months of January'08 & December'08 (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
December'08	0.63	99.31	0.06	0.00
January'09	2.11	97.83	0.06	0.00

January' 08	19.72	80.28	0.00	0.00
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*Maximum (Inst.) Frequency : **50.69 Hz** on 02.01.09 at 04:02Hrs
Minimum (Inst.) Frequency : **48.78 Hz** on 10.01.09 at 10:14 Hrs

From the above table following may be observed:

- o The percentage of time frequency profile in the IEGC band (i.e. 49.0 to 50.5 Hz.) during the month of January'09 has decreased as compared to the previous month i.e. December'08 and has increased with respect to the corresponding month of the previous year (i.e. January'08).
- o The percentage of time frequency below 49.0 Hz has increased to 2.11 % in the month of January' 09, as compared to 0.63 % in December'08 and has decreased as compared to the corresponding month of the previous year (i.e. January'08).
- o The percentage of time frequency remained above 50.50 Hz in the months of January'09 is insignificant.

The detailed daily frequency for the month of January'09 is enclosed at **Annexure-II**.

ERLDC may please comment on frequency profile observed during Jan'09.

Members may please discuss.

2.3 VOLTAGE PROFILE OF IMPORTANT SUB-STATIONS IN EASTERN REGION

<i>Name of the sub-station</i>	<i>Maximum Voltage (kV)</i>	<i>Minimum Voltage (kV)</i>
400 kV PURNEA	435	413
400 kV BINAGURI	434	411
400 kV BIHARSHARIFF	432	404
400 kV DURGAPUR	425	408
400 kV PATNA	434	405
400 kV JEERAT	418	381

It may be noted that during the month of January'09, 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.

Members may please note and discuss.

Deliberation in the meeting

Shri P. Mukhopadhyay, DGM, ERLDC expressed that in the month of January the Eastern Region as a whole did not experience low voltage but low voltage in areas like Bariada, Jeerat & Ara did occur. Drwal of VAR in low voltage is a matter of concern. He requested constituents to co-ordinate their transformer tap positions. In this context GM, ER-II expressed that utilities need to put Capacitor Bank in order to improve their power factor. DVC representative informed the house that DVC has requested IIT Kharagpur to study the low voltage problem around Maithon

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 January'09.

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

ITEM NO. 3 Important Events

Terms and conditions of tariff for the period 2009-14 have been released by CERC and the same is applicable w.e.f 01.04.2009.

Members may kindly note

Deliberation in the meeting

Member Secretary informed the house that a seminar has been arranged on 6th March, 2009 in ERPC to discuss the new tariff (for 2009 – 2014). Senior officers from different organisations will speak on the new issue.

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	<i>Powergrid committed during the last OCC to bring the ICT by end of January'09. Subsequently, Powergrid representative informed that dehydration of the ICT had been started and the same was expected to be read by 10th February'09. However, the said ICT has not yet been restored. PowerGrid may please intimate the Present status. GM ER-II informed that the ICT will be restored on 15th March, 2008..</i>
2.	Tie bay of 400kV KhSTPP-Patna-1 at KhSTPP end.	-	--	<i>KhSTPP may furnish outage date ,expected date of restoration and reasons for outage. KhSTPP representative informed that the bay will be restored by 15th March,2008..</i>
Prolonged Outage				
1.	150 MVA 220/132 Kv, ICT-I at Bodhgaya	04.03.2008		<i>Expected by February, 2010.</i>

ITEM NO. 4B Major units outage /Maintenance:

STATION	NO.	CAPACITY	DATE	REASONS FOR OUTAGE	Date of Restoration
Kolaghat	4	210	Restored On 15.02.09 09=51 Hrs.	GT Maintenance	15.02.09 09:51 Hrs
Kolaghat	6	210	Restored on 09.02.09	Stator Earth Fault & Turbine Overhauling	09.02.09 22:15 Hrs
Santaldih	5	250	04.01.09	Due to Coal Shortage	
Bakreshwar	4	210	21.11.08	Ash Problem	1 st Week of March,2008
Farakka STPS	3	200	30.01.09	GT Problem	6 th March,2008

ITEM NO. 5 GRID INCIDENCES IN ER SYSTEM DURING JANUARY, 2009.

I. Tripping of all units of Santaldih TPS on fire hazard on 20.01.2009:

At 14:46 Hrs of 20.01.09 due to fire hazard at STPS, running units #2,3 tripped (Unit# 1,4,5 were previously out of bar).

WBSETCL may furnish details of events resulting in the fire hazard and deliberate o methods to prevent future recurrences of the same.

Deliberation in the meeting

WBSETCL representative informed that a committee from the state has been formed to look into the matter.

II. Tripping of all units of DPL on 24.01.09:

At 01:10 hrs of 25.01.09 DPL Unit# 6 tripped. Subsequently, at 02:40 Hrs of 25.01.09 Units#2,7 tripped and further at 04:40 Hrs the remaining running units of DPL (Units # 3,4,5, Unit# 1 was previously out of bar) tripped.

WBSETCL/DPL may furnish details of events leading to such staggered tripping and deliberate o methods to prevent such future recurrences.

Deliberation in the meeting

DPL representative was not present in the meeting. WBSETCL representative informed that 132 KV Durgapur – DPL Ckt. – II tripped first due to fog and subsequently the units tripped due to lack of evacuation path. As the sequence of events leading to tripping of all the units was not clearly established Member Secretary requested WBSETCL to give presentation on the incidence with diagram for better understanding of the members.

III. Tripping of lines from KhSTPP on 06.02.09:

Shutdown of 400kV Patna-Balia D/c was approved for 06.02.09. 400kV Patna-Balia-I and 400kV Biharshariff-Balia-II were previously out on overvoltage. To avail shutdown of 400kV Patna-Balia D/C it was necessary to take 400kV Biharshariff-Balia-II into service. At 07:29 Hrs of 06.02.09 while attempting to charge 400kV Biharshariff-Balia-II, the line tripped alongwith 400kV Patna-Balia-II reportedly due to problem at Balia end. At 07:42 Hrs 400kV KhSTPP-Patna-I was opened on overvoltage at Patna. As 400kV Biharshariff-Balia-II could not be brought into service, shutdown of 400kV Patna-Balia D/C was put on hold and it was decided to take one circuit of 400kV Patana-Balia section into service. At 11:04 Hrs of 06.02.09 while charging 400kV Patna-Balia-I from Patna end, 400kV KhSTPP-Patna –II and 400kV KhSTPP-FSTPP-I tripped. As a result of the trippings, Khagaul load being fed from Patna was

disrupted. It was reported by KhSTPP that on charging of 400kV Patna-Balia-I from Patna end DT was received at KhSTPP end for 400kV Patna-KhSTPP-II line and as the main CB of 400kV FSTPP-KhSTPP-I at KhSTPP end was not in service both the lines tripped. The following may be deliberated w.r.t incident:

- 1) **Tripping of 400kV Biharshariff -Baliala-II on attempting to charge the line alongwith tripping of 400kV Patna-Balia-II.**
- 2) **Reasons for receipt of DT at KhSTPP end while attempting to charge 400kV Patna-Balia-I.**
- 3) **Presently tie bay of 400kV KhSTPP-Patna-I and main bay of 400kV KhSTPP-FSTPP-I are out of service. KhSTPP may furnish expected date of restoration of the above bays. Also availability/positioning of main breakers of 50MVAR bus reactors at KhSTPP need to be clarified. KhSTPP may accordingly present single line diagram of KhSTPP switchyard for clarification, also indicating whether any additional bay are under outage.**

Deliberation in the meeting

Powergrid representative informed that 3 attempts were made to charge 400 KV Biharshariff - Baliala -II from Biharshariff end, O/V Relay activated at the remote end & DT received at Biharshariff end. He stated that the tripping on overvoltage is a local phenomenon as the relay receives signal from local CVT.

IV. Tripping of all running units in CTPS and Bokaro 'B' on 11.02.09

At 07:10 Hrs of 11.02.09 due to suspected Bus fault at CTPS, 220kV CTPS-Mejia D/c, 220kV CTPS-Kalyaneshwari D/C, 220kV CTPS-Bokaro'B' D/C, 220/132kV ICTs at CTPS tripped. Consequently, western part of DVC system including CTPS and Bokaro'B' remained synchronized to the grid through 132kV CTPS-Waria D/C and 220kV Joda-Jamshedpur S/C. 220kV CTPS-Waria D/C and 220kV Joda-Jamshedpur S/C tripped at 07:17 hrs and 07:27 Hrs respectively. As a result of above trippings, the western part got islanded with Bokaro'B' and CTPS units with the islanded frequency touching 47.65Hz. The island survived till 07:40 Hrs when it ultimately collapsed on load generation imbalance. Running Units#1,2,3 at Bokaro'B' and Units#1,2 at CTPS 132kV side tripped. Loss of generation was around 650 MW with corresponding loss of load affecting Coal /Steel/mines/railways.

DVC may furnish details regarding problems at CTPS which initiated the disturbance alongwith the detailed sequence of events leading to collapse of western part of DVC system.

Deliberation in the meeting

DGM, ERLDC stated that RTU are not properly wired in some of the stations in DVC system.. Some RTU report from Chandrapura is required to analyse the tripping incidence.

It was decided that DVC & DPL in co-ordination with ERLDC will evolve certain evacuation scheme for incoming generating units, ERPC will co-ordinate the meeting.

ITEM NO. 6 OPERATIONAL PLANNING

(A) REVIEW OF SHUTDOWN PROPOSALS, AS APPROVED IN LAST (34th) OCC MEETING OF ERPC vis-à-vis ACTUAL SHUTDOWN/ NORMALISATION OF THE TRANSMISSION SYSTEM FOR JANUARY' 2009

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

The shut down proposals which are received by ERPC for the month of February' 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 FEBRUARY'09 & MARCH'09 (FOR THE YEAR 2008-09)

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

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

It was agreed in last OCC meeting that constituents would furnish Coal supply position and details of generation loss on account of coal shortage but response from the constituents in this regard is poor. Constituents are once again requested to furnish figures for loss of generation in MU and maximum generation loss in MW during peak hours of a day on a daily basis along with coal stock position in the power stations.

Sl. No	Name of Constituents	Coal Stock Position	Loss of Generation Figures for Jan'09
1.	BSEB	Not Furnished	Not Furnished
2.	JSEB PTPS	32000 MT	NIL
2.	TVNL	17126 MT as on 19-01-2009	NIL
3.	WBPDC Kolaghat TPS Santaldih TPS		36.504 MU in Jan'09 3.127 MU in Jan'09
4.	CESC	-DO-	-DO-
5.	OPTCL (Ib TPS)	190398 MT against daily requirement of 8500 MT	-DO-
6.	NTPC FSTPS KhSTPP TSTPS	Not Furnished	153.11 MU 227.85 MU 90.04 MU
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 POWER SUPPLY TO AGRICULTURE SECTOR

STATE	AGRICULTURE DEMAND	AGRICULTURE DEMAND MET	SHORTFALL
West Bengal			
BIHAR			
JHARKHAND			
ORISSA			
SIKKIM			

Deliberation in the meeting

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

Constituents agreed to submit the same before OCC.

ITEM NO. 9 LONG OUTAGES OF GENERATING UNITS

The planned maintenance needs to be carried out accordingly to the recommendations of Kukde Committee. Therefore it is requested you to advise the RPCs to see whether the planned maintenance is being carried out by the State and Central Sector Generating Companies according to the recommendations of Kukde Committee and also to review the planned and forced outages of generating units on regular basis and give an Exception Report to Central Electricity Authority and Ministry of Power every month.

Deliberation in the meeting**ITEM NO. 10 Frequent tripping of 400kV Malda-Purnea section**

A compilation of trippings of 400kV Malda-Purnea section for the past one year had been carried out (enclosed at Annexure-II) and it has been observed that trippings are mostly due to insulator decapping. With reduced inflow at ISGS hydro power stations in Bhutan/Sikkim/NER, power flow across 400kV Malda – Purnea section is expected to remain high upto March'09. Powergrid is accordingly requested to take necessary steps for preventive maintenance action to prevent such undesired trippings in future.

Deliberation in the meeting

Powergrid representative informed that insulators in the 400 KV Malda – Purnea transmission line are already being replaced & the replacement of insulators will be done as & when shutdown of the line is available.

ITEM NO. 11 Scheduling of LTOA power from DVC to NR

150 MW power from Mejia# 6 of DVC to NR has been allocated and the recipient states in NR have also been identified. However, DVC is not presently declaring availability of power for NR constituents from Mejia# 6.

DVC may kindly clarify regarding the same.

Deliberation in the meeting

DVC representative agreed to intimate the same.

ITEM NO. 12 Committee report on repeated cascade trippings in South Orissa system

A committee consisting of representatives from ERLDC, Powergrid, OPTCL was formed to investigate the repeated cascade trippings and collapse of South Orissa system. The committee meeting was held in Bhubhaneshwar on 19th January'09, where detailed deliberations took place. Preparation of report is in progress which would be finalized after receipt of the required data from constituents.

Deliberation in the meeting

Members noted the above

ITEM NO. 13 Furnishing of information regarding non-availability of bays/ elements in substations

It has been observed that several bays/ elements in important 400kV sub-stations are not available and information regarding the same are obtained only when trippings from the substation are analysed. All constituents are requested to furnish information regarding non-availability of bays/elements in sub-stations immediately on outage of the same for further compilation / study at ERLDC end.

Deliberation in the meeting

Members noted the above.

ITEM NO. 14 Delayed receipt / non-receipt of disturbance reports and DR/EL printouts

It has been observed that on occurrence of a grid disturbance/ incident constituents are not furnishing detailed reports with relay indications and DR/EL printouts even after request for the same. It may be noted that as per IEGC Clause No.2d and 5.2q of IEGC furnishing of data relating to any incident/disturbance along with DR/EL printouts is mandatory even if not requested by RLDC. The above clauses are quoted below:

Clause 5.2 d) “Any tripping, whether manual or automatic, of any of the above elements of Regional grid shall be precisely intimated by the concerned State LDC/Agency to RLDC as soon as possible, say within ten minutes of the event. The reason (to the extent determined) and the likely time of restoration shall also be intimated.”

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 an event.

All constituents are accordingly requested to promptly furnish details of events including all relay indications, DR/EL printouts on occurrence of a disturbance / incident.

Deliberation in the meeting

Constituents assured to furnish details of events including all relay indications, DR/EL printouts on occurrence of a disturbance promptly.

ITEM NO. 15 Prompt restoration of system elements

In meeting taken by Secretary (Power) on 22.12.08, it was decided that penalty may be imposed on states which do not show promptness in restoration of transmission lines. The decision is quoted below:

“RLDCs may evolve a mechanism for restoring the lines and imposing the penalty on the States which do not show adequate and timely response, in consultation with CERC.”

Members may kindly note.

Deliberation in the meeting

Members noted the above

ITEM NO. 16 ISSUE RAISED BY

POWERGRID

- A. REPLACEMENT OF CIRCUIT BREAKERS, LAs & PLCC

- B. MICROWAVE COMMUNICATION SYSTEM UNDER ER-ULDC PROJECT – ALTERNATE COMMUNICATION ARRANGEMENT DUE TO VACATION OF ALLOCATED MW FREQUENCY AS PER GOI DECISION

Members may kindly note the details given in Annexure – V

Deliberation in the meeting

After detailed deliberation constituents principlly agreed to the above proposals (A & B).

ITEM NO. 17 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	CTPS	7 & 8	Unit # 7 Oil synchronized on 06.01.09 13:15 Hrs. Coal synchronization is expected by end of May, 09 Unit # 8 Oil synchronized by end of March,09
2	KhSTPP	7 (500 MW)	March,09
3	400 KV Ranchi-Rourkella D/C		By November,2009

ITEM NO. 18 DATE AND VENUE OF THE NEXT (36th) OCC MEETING OF ERPC.

Date and venue of 36th OCC would be notified shortly.
