

Orissa Power Transmission Corporation Ltd.  
Bhubaneswar.



*Agenda  
for  
62<sup>nd</sup> Power System Operational  
Coordination Meeting*

**Date: 25.08.2010**

**Venue: Power Training Center, OPTCL, Chandaka**

**AGENDA FOR THE 62<sup>nd</sup> POWER SYSTEM OPERATIONAL CO-ORDINATION MEETING  
TO BE HELD AT POWER TRAINING CENTER, OPTCL, CHANDAKA,  
25.08.2010 (WEDNESDAY) AT 11.30 HOURS**

**ITEM NO: 1 Confirmation of the minutes of the 61<sup>st</sup> Operational Coordination Meeting held at MTC, Kalyani Complex, Bhubaneswar on 28.05.10.**

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2007(Vol.-V)-1253<sup>(28)</sup>. Dated 02.06.2010. No comment has been received from any of the members.

*Members may offer their comments. If there is no comment, the minutes of the meeting may please be confirmed.*

**ITEM NO: 2 REVIEW OF GRID PERFORMANCE FOR JULY'10.**

**(A) Frequency:**

**Hourly frequency variation for the month of June & July'10**

Month	% of time frequency remained					
	<49.2	49.2-49.5	49.5-49.7	49.7-50.0	>50.2	49.5-50.2
June-10	0.47	5.08	18.38	72.25	3.82	90.63
July-10	2.45	8.78	18.98	65.34	4.44	84.33

**Maximum & Minimum frequency during the month of June'10 & July'10**

Month	Freq (Hz)	Date	Time
June-10	Maximum – 50.71	25.06.2010	04:10 Hrs
	Minimum – 48.81	20.06.2010	00:11 Hrs
July-10	Maximum – 50.69	05.07.2010	04:02 Hrs
	Minimum – 48.70	16.07.2010	21:20 Hrs
July-09*	Maximum – 50.65	17.07.2009	17:02 Hrs
	Minimum – 48.77	20.07.2009	23:06 Hrs

The detail of frequency profile for the month of July'10 is enclosed as **Annexure-I**.

**(B) Grid Demand for the month of June & July'10**

Month	Demand	Maximum Consumption		Maximum Demand			Minimum Demand		
	MU	MU	Date	MW	Date	Time	MW	Date	Time
June-10	1776	62.90	29.06.10	3058	28.06.10	20:00	1774	03.06.10	15:00
July-10	1861.5	62.88	30.07.10	3193	31.07.10	21:00	1935	02.07.10	15:00
July-09*	1709.8	64	22.07.09	3150	23.07.10	20:00	1527	02.07.09	13:00

The Hourly average demand on daily basis for the month of **July'10** is enclosed as **Annexure-II**.  
**Members may please discuss.**

*\*\*The grid demand is calculated from the generation-exchange figures basing on instantaneous meter readings at STPS-TTPS, STPS-Duburi, STPS-Rengali & Indravati Generation and average meter reading of the rest.*

**(C) Voltage Profile of 220 KV Buses in OPTCL system for the month of July '10**

S/s Name	Maximum (kV)	Minimum (kV)	S/s Name	Maximum (kV)	Minimum (kV)
Jayanagar	253	232	Budhipadar	230	221
Theruvalli	248	221	Duburi	235	210
Bhanjanagar	230	212	Balasore	230	200
Chandaka	230	210	Meramundali	230	212
Narendrapur	250	206	Bidanasi	227	198
Joda	225	212	Katapalli	223	206
Tarkera	227	220	Nayagarh	233	210
Bhadrak	225	190	Mendhasal	230	206

The maximum voltage at Jayanagar Grid S/s was occurred due to under loading of long transmission lines and VAR flow from PG end.

The minimum Voltage at Bhadrak occurred due to low voltage at Duburi – Balasore command area. Members may discuss.

**(D) Energy Generation / Import during the month of July'10**

Source of Power	Energy (MU)
Thermal (TTPS+IB)	517.809
OHPC Stations including Machhkund share	390.612
CGP Support	429.044
ISGS drawal	494.230
<b>TOTAL</b>	<b>1839.695</b>

**(E) DISCO Drawal upto the month of July '10**

Name of DISCO	Approved Energy Drawal Prorated for July'10 in MU	Actual Energy Drawal during July'10 in MU	Overdraw / Underdraw (MU) (Prorated Vs. Actual)
CESU	535.00	635.342	135.342
NESCO	426.83	426.550	-0.280
WESCO	520.33	528.075	8.420
SOUTHCO	197.33	208.391	11.060
NALCO		14.783	
IMFA		18.23	
<b>TOTAL</b>		<b>1831.371</b>	

*\*The above figures are as per EBC data .*

*Energy drawal by SOUTHCO are excluding of energy consumed by NALCO at Damanjodi and IMFA at Theruvalli.*

**(F) Major Events in the month of June'10 & July'10.**

13.06.10: 220 kV Balasore – Kuchei Ckt.II charged at 19:26 hrs., which was previously charged with 132 kV.

04.07.10:220 kV Narendrapur – Mendhasal Ckt.II charged at 12:18 hrs. and stood OK.

**(G) Under Frequency Relay operation in OPTCL System during the month of July'10.**

There is no UF Relay operation occurred during the month of July' 10.

It was decided in the 7<sup>th</sup> Protection Sub – Committee Meeting of ERPC held on 12.08.10 at Kolkata that the present quantum of load relief under UFR scheme shall be doubled, so that the effective load relief can be met at the time of low frequency condition. Accordingly, the revised feeder arrangement under UFR scheme has been proposed by OPTCL. The said arrangement may be implemented.

It was also decided in the above meeting that, the security monitoring group of ERPC shall visit each constituent unnoticing, to verify the function of UFR operation.

**C.G.M., (O & M), OPTCL to take necessary action in this regard.**

**(H) Important Grid Incidences during the month of June & July'10**

There is no reportable grid incident occurred during the month of July 2010. However Important Grid incidents occurred during the month of June' 10 is annexed as Annexure-III.

*Members may discuss*

**(I) Outage of major transmission Lines/ Elements during the month of June & July'10 (for more than 10 hours).**

Sl No	Transmission lines	Tripping Dt/time	Restoration Dt/time	Reason
1	220 kV New Duburi-Paradeep Ckt-I	05.06.10 06:01	06.06.10 18:58	'R' phase insulator damaged at Loc.No.-427.
2	220 kV Jayanagar-U.Kolab Ckt-II	05.06.10 16:17	09.06.10 18:59	'Y' phase LA burnt at Upper Kolab
3	132 /33 kV, 40MVA tfr. -II	07.06.10 00:31	09.06.10 15:25	132kV 'B' phase LA & CT burnt.
4	220 kV New Duburi-Paradeep Ckt-I	10.06.10 04:50	11.06.10 17:25	'R' phase insulator damaged at Loc.No.-427
5	220 kV New Duburi-Paradeep Ckt-II	10.06.10 04:50	10.06.10 17:09	Tripped simultaneously
6	220 kV New Duburi-Balasore Ckt	22.06.10 17:10	28.06.10 20:01	'R' phase insulator damaged at Loc.No.-385.
7	220 kV New Duburi-Paradeep Ckt-II	22.06.10 23:38	23.06.10 16:57	Not Received
8	132 kV Narendrapur-Balugaon-Khurda Ckt.	23.06.10 23:56	24.06.10 19:07	No fault found
9	132 kV Narendrapur-Balugaon-Khurda Ckt.	24.06.10 21:46	25.06.10 22:16	No fault found
10	220 kV Balasore-Bhadrak Ckt	29.06.10 21:25	30.06.10 10:05	No fault found
11	132 kV Budhipadar-MCL Ckt.-I	30.06.10 00:53	02.07.10 11:55	'R' phase conductor snapped at loc No. 47
12	132 kV Budhipadar-MCL Ckt.-II	30.06.10 00:53	30.06.10 20:23	-do-
13	132 kV Narendrapur-Balugaon-Khurda Ckt.	06.07.10 06:01	08.07.10 11:00	No fault found
14	132 kV Khurda-Puri Ckt	10.07.10 21:25	11.07.10 14:15	'Y' phase jumper snapped at Loc No.-131.
15	220 kV Jayanagar-Balimela Ckt-II	23.07.10 21:40	24.07.10 18:46	Problem at Balimela end

From the above data it is noticed that, most of the tripping are due to failure of insulators.

***C.G.M.(O&M) may please deliberate. Paradeep substation is not furnishing the tripping details in spite of repeated telephonic request from SLDC***

**ITEM NO: 3 Drawal of Machhakund Power**

The hourly drawal of Machhakund power during the month of July' 10 is annexed herewith as Annexure-IV. The average drawal during April' 2010 was 34 MW. Present drawal from Machhkund is to the tune of 37 MW in average. At present only four nos. of Machhakund units are available in the bus, generating 74 MW.

**Display of Machhkund generation:**

OHPC may deliberate regarding procurement action of RTU to be installed at Machhakund PH.

**ITEM NO: 4 Review of Outage Program of State Generators / Transmission elements for the month of August'10 & September'10:**

Outage programme of EHT lines and S/S for the year 2010-11 has already been approved.

Tentative Outage programme for State Generators for August'10 & September'10 are as follows:

Sl.	Station	Unit	August'10		September'10	
1	Burla	-	NIL	NIL	NIL	NIL
2	Chiplima	-	NIL	NIL	NIL	NIL
3	Balimela	# 2	23.06.10 to continue	Thrust Bearing problem	23.06.10 to continue	Thrust Bearing problem
		#8	25.06.10 to continue	Vibration in the turbine	25.06.10 to continue	Vibration in the turbine
4	U.kolab	-	NIL	NIL	NIL	NIL
5	Rengali	# 1	18.08.08 to Continue	Generator fault	18.08.08 to Continue	Generator fault
6	U. Indravati	-	NIL	NIL	NIL	NIL
7	TTPS	#3	19.08.10 to 18.09.10	Annual Overhauling	19.08.10 to 18.09.10	Annual Overhauling
		#4	18.08.10 to continue	BFP problem	18.08.10 to continue	BFP problem

Representative from OHPC / TTPS are requested to give a deliberation on the outage programme.

**ITEM NO: 5 Generation Program for the month of August'10 & September'10.**

Generation schedule for the month of August'10 & September'10 furnished by OHPC are given below.

Name of Hydro Gen. Station	Generation Programme (MW)		Reservoir Level as on 01.07.10	Reservoir Level as on 01.08.10	MDDL	High Flood Reservoir Level
	August'10	Sept'10				
HPS, Burla	200+50	Not received from OHPC	595.62 ft	611.33 ft	590 ft.	630 ft.
U.Indravati	150		625.40mtr	629.37 mtr	625mtr	642 mtr
Balimela	100		1445.30ft	1466.50 ft	1440 ft.	1516 ft.
U.Kolab	50		844.69mtr	849.43 mtr	844 mtr	858 mtr.
Rengali	50		109.75mtr	110.88 mtr	109.2mtr	123.5 mtr.
MKD (O/D)	30		2683.10ft	2711.40 ft	2685 ft.	2750 ft.
<b>TOTAL</b>	<b>800</b>					

**ITEM NO:6 Day ahead Generation Schedule for Hydro stations**

It was decided in the meeting convened by the Member (Technical), OERC that all the hydro stations of OHPC shall forward their respective day ahead generation schedule indicating Peak, Minimum and Average generation for the day. The above schedule for Rengali PH was received for few days. At present non of the hydro stations are furnishing their day ahead generation schedule as decided in the above meeting.

*OHPC may deliberate.*

**ITEM NO: 7 Operation of Auto Re-close Facility on Transmission Line.**

It was decided in the 7<sup>th</sup> Protection sub – Committee Meeting of ERPC held on 12.08.10 at Kolkata that , the operation of single phase auto re-closure is extremely essential to prevent undesired tripping of lines due to single phase to ground transient fault, the availability of single phase auto re-closure and keeping them in service is a must for important intra-state / CTU / Inter-regional transmission lines. The required information in case of non- operation of auto re-closure is to be furnished to ERLDC.

C.G.M., (O & M), OPTCL to take necessary action in this regard.

**ITEM NO: 8 Analog Triggering of Disturbance Recorders.**

It was decided in the 7<sup>th</sup> Protection sub–Committee Meeting of ERPC held on 12.08.10 at Kolkata that, at many substations DR outputs from Numerical relays as well as Disturbance Recorders are not available / not functioning and are not time synchronized, causing difficulty in analyzing tripping events and disturbances, IEGC clause 4.6.3 mandates keeping all the recording instruments time synchronized and in working condition and furnishing of the recorded data.

An action plan for implementation of the above shall be furnished to ERLDC.

**C.G.M., (O & M), OPTCL to take necessary action in this regard.**

**ITEM NO: 9 Demand Management Measures.**

It was decided in the 53<sup>rd</sup> OCC Meeting of ERPC held on 13.08.10 at Kolkata that ,as per 5.4.2(e) of Demand Management clause of IEGC, to maintain the system frequency within permissible band all constituents are identify following four categories of interruptible loads

- (a) Loads for schedule power cuts / load shedding
- (b) Loads for unscheduled load shedding
- (c) Loads for UFR actuated shedding
- (d) Loads for SPS (Special Protection Scheme) actuated shedding.

Since ER at present does not have any SPS actuated load-shedding scheme, constituents are requested to furnish the first three categories of identified load.

**C.G.M., (O & M), OPTCL to take necessary action in this regard.**

**ITEM NO:10 Relay Co-ordination at Budhipadar and Jayanagar command area.**

It was noticed from the tripping incidences during the month of May & June 2010 that, the relays at Jayanagar & Budhipadar command area are not properly coordinated. However the above issue had already been discussed in the 2<sup>nd</sup> Protection Sub-Committee Meeting of OPTCL held on 28.05.10 and it was decided to take up the relay co-ordination work in the above command area.

**CGM (O&M), OPTCL may please intimate the status**

**ITEM NO:10 Status of New Lines funded by WB/ADB / Deposit work / OPTCL's own funding**

Sl. No	Details of project	Status as on last meeting
1	132 kV Burla - Sambalpur SC line LILO at Katapali	All works for LILO arrangement has been completed. The line could not be charged due to breaker problem at Katapali, which is to be completed before monsoon.

**Sr.GM.(TP&C), OPTCL may please deliberate the present status**

**ITEM NO:11 Issues related to RTU problem and speech connectivity problem under central sector S/S and SLDC.**

In the 53<sup>rd</sup> OCC meeting of ERPC held on 13.08.2010 at Kolkata, GM, ERLDC stated that the EMS is the major and costliest part of SCADA system. Without uninterrupted data acquisition, EMS package will not function properly. To ensure function of RTUs and data acquisition from each RTU, constituents should avail the services of AREVA personals

deployed at SLDCs. The constituents also requested to utilize the EMS package of SCADA system.

It was decided to name one person from each RTU location and one executive from SLDC to co-ordinate with ERLDC regarding the above issue. The status of RTU shall be intimated to ERLDC through the SLDC coordinator everyday.

GM (Telecom), OPTCL may intimate the names of such officers, one from each RTU location to Sr. G.M (PS). The SCADA review committee constituted in the last meeting may be made functional to review all matters regarding SCADA. GM (GO) shall function as the co-coordinator from SLDC on SCADA related issues. The decisions taken in the SCADA meeting of ERLDC and all other matters relating to SCADA system may be intimated to Sr. GM (PS) regularly.

***GM (Telcom), OPTCL to take necessary action in this regard***

**ITEM NO:12 Testing of DG set at SLDC and Sub-LDCs**

As decided in the 53<sup>rd</sup> OCC meeting of ERPC held at Kolkata on 13.08.2010, all the DG sets at SLDC are to be tested on 3<sup>rd</sup> Wednesday of each month and the status shall be forwarded to ERLDC.

***GM(Telcom) to take necessary action***

**ITEM NO:13 Communication issues**

**(I)Integration of NALCO & RSP CGP with OPTCL –Present status may be intimated.**

In the last meeting it was decided that NALCO shall be given 7 days notice for installation of RTU. In case they fail to do so, the matter shall be referred to OERC.

**(II) Installation of RTU and associated equipments for RSP.**

In the last meeting it was stated by RSP that they will take 3 months for completion of all works. The present status may please be intimated.

***G.M (Telecom) may please deliberate the present status***

**(III)Installation of communication equipment by CGPs/ Industries.**

As stated by A.G.M (Telecom), in the last meeting, the status of installation of SCADA/PLCC equipments of some of the major CGPs is as follows.

Sl. No	Name of CGP	Status of procurement of RTU and equipments
1	M/S Bhushan Steel Ltd, Meramunduli	All equipments commissioned. Data is not displaying due to problem in digital system. Breaker status has yet to be displayed.
2	M/S Hind Metals, Meramunduli	Arrival of ABB engineers to rectify the problem is awaited.
3	M/s Bhushan Power & Steel Ltd, Jharsuguda	Order for modification has been placed with Gfenu.
4	M/S Emami Paper Mills, Balasore	Already commissioned, but still under observation due to erratic display.

*G.M (Telecom) may please deliberate the present status.*

(IV) At present 22 Nos. of CGPs have been connected with OPTCL system at 132/220 kV Voltage levels. Out of them only a 7 Nos have complied SCADA provision for real time data display, due to which, a substantial quantum of power injection / drawal could not be monitored on real time.

*G.M (Telecom) may please deliberate the action taken in this regard.*

**ITEM NO:14: Operational Constraints.**

**(I) Over loading of 132 kV Meramundali- Dhenkanal line**

It is noticed that 132kV Meramundali-Dhenkanal ckt is getting over loaded frequently. The problem may further aggravate due to drawl of more power by Nuapatna Grid (by up gradation). It may be examined for making 132 kV Aarati-Meramundali line LILO at Nuapatna.

**(II) Evacuation of power from Sterilite IPP**

On synchronization of Sterilite IPP(Unit-II), 550 MW of power is required to be evacuated from the above IPP, which would cause evacuation problem at budhipadar command area. The second evacuation link may be thought of before COD of the above Unit.

**(III) Stringing of earth wire in 220 kV Theruvali-Bhanjanagar line**

In the last meeting it was stated by CGM (O&M), OPTCL that, tendering process for the above work had been completed.

*CGM (O&M) may please deliberate the present status.*

**ITEM NO:15 Mock Black Start exercises for Indravait PH.**

It was decided in the 53<sup>rd</sup> OCC meeting of ERPC that mock black start exercise for Indravati PH by availing power from it's DG set to be carried out during 2<sup>nd</sup> week of September. Accordingly a scheme is under preparation by SLDC. After getting approval from ERLDC the same shall be forwarded to OHPC. OHPC may intimate it's readiness for the above exercise.

*OHPC may please deliberate.*

**ITEM NO:16 Execution of PPA with CGPs**

It is noticed that Gridco has not executed PPA's with some of the major CGPs for purchase of power although day ahead scheduling is being done by SLDC for the CGPs. The PPAs for some of the CGPs have already been expired. It is requested to explore for execution / renewal of PPAs with all the CGPs from whom Gridco intend to purchase power. The above

arrangement is required to examine the existing contracts for allowing / disallowing open access to the CGPs.

*Gridco may please deliberate.*

**ITEM NO:17 Compliance of drawal schedule by Discoms**

It is noticed that the Discoms are not complying their respective drawal schedule very often. Due to the above non-compliance SLDC is forced to draw power from the Grid even at adverse frequency conditions. All the Discoms are requested to comply their respective drawal schedule. The non compliance of directions of SLDC are being intimated to ERPC as per provision under IEGC clause 6.4.7.

**ITEM NO:18 Members may raise issues if any.**

**ITEM NO:19 Date and Venue of the next (63<sup>rd</sup>) PSOC meeting:**

The members may decide the Venue and date of the 63<sup>rd</sup> Power System Operational Co-ordination meeting.